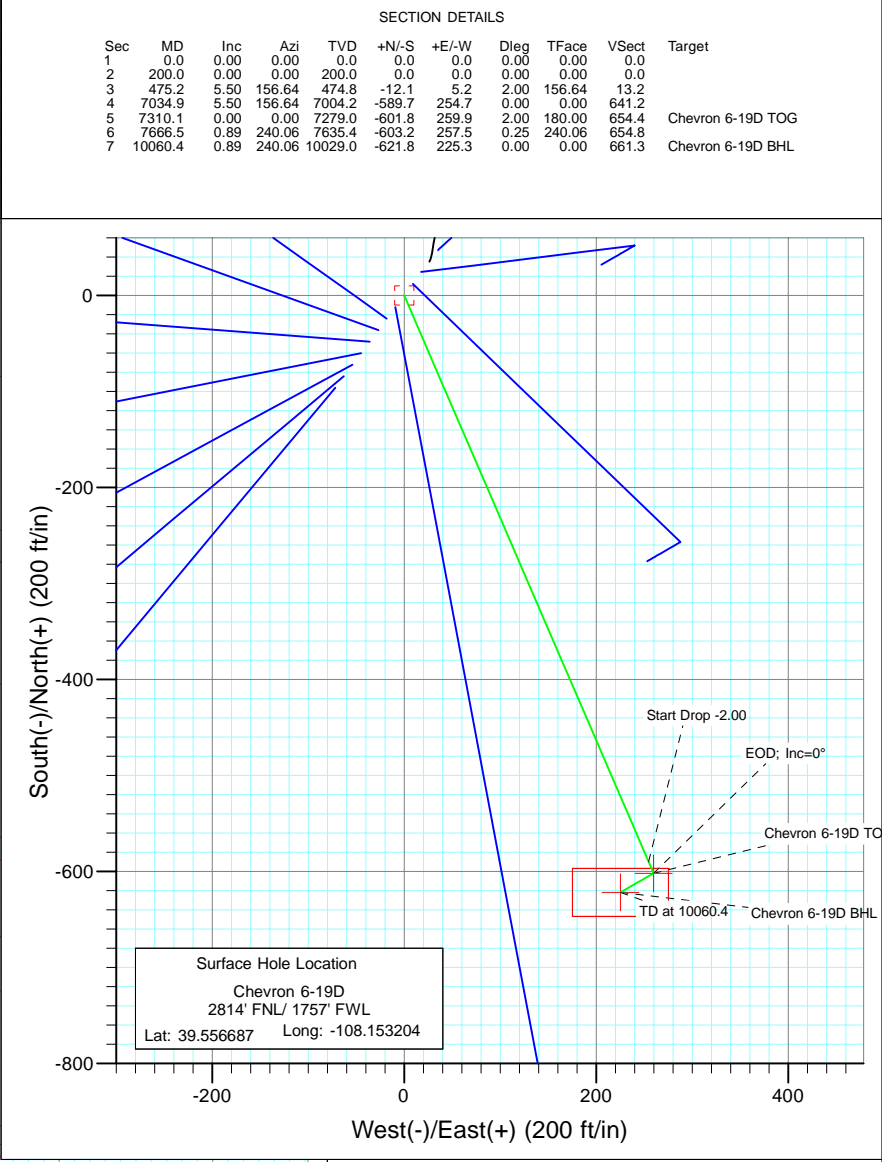
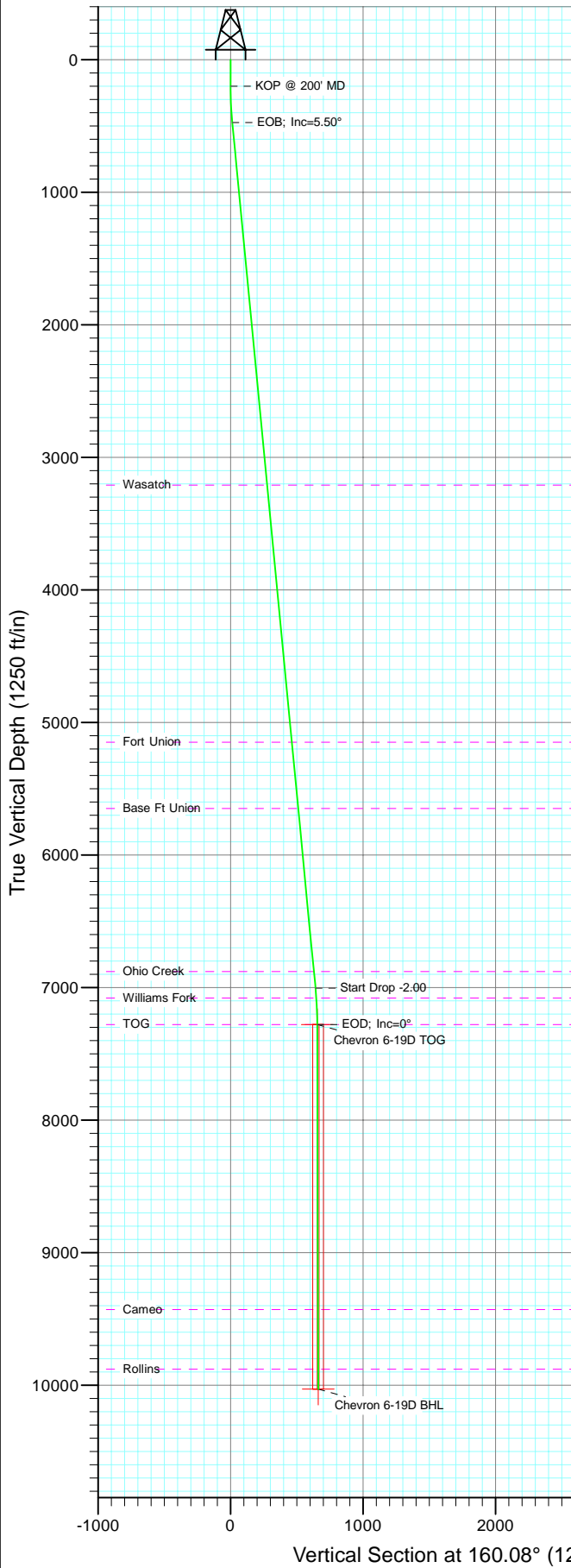




Project: Garfield County
Site: Sec 6 T6S R96W (F06 696)
Well: Chevron 6-19D
Wellbore: DD
Design: Plan #2



Surface Hole Location
Chevron 6-19D
2814' FNL/ 1757' FWL
Lat: 39.556687 Long: -108.153204

Bottom Hole Location
Chevron 6-19D
3434' FNL/ 1982' FWL
Lat : 39.554980
Long. : -108.152405

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3209.0	3222.1	Wasatch
5149.0	5171.1	Fort Union
5649.0	5673.4	Base Ft Union
6879.0	6909.1	Ohio Creek
7079.0	7109.9	Williams Fork
7279.0	7310.1	TOG
9429.0	9460.3	Cameo
9879.0	9910.4	Rollins

DESIGN DETAILS: Plan #2

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

Target	Azimuth	Origin	N/S	E/W	From TVD
Chevron 6-19D BHL	160.08	Slot	0.0	0.0	0.0

Compass rose showing True North (T) and Magnetic North (M).
Azimuths to True North
Magnetic North: 10.61°
Magnetic Field
Strength: 52427.0snT
Dip Angle: 65.81°
Date: 12/2/2009
Model: IGRF200510

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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 6-19D					
Well Position	+N/-S	0.0 ft	Northing:	1,638,578.29 ft	Latitude:	39.556687
	+E/-W	0.0 ft	Easting:	2,252,021.01 ft	Longitude:	-108.153204
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	160.08

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
475.2	5.50	156.64	474.8	-12.1	5.2	2.00	2.00	0.00	156.64	
7,034.9	5.50	156.64	7,004.2	-589.7	254.7	0.00	0.00	0.00	0.00	
7,310.1	0.00	0.00	7,279.0	-601.8	259.9	2.00	-2.00	0.00	180.00	Chevron 6-19D TOG
7,666.5	0.89	240.06	7,635.4	-603.2	257.5	0.25	0.25	-33.65	240.06	
10,060.4	0.89	240.06	10,029.0	-621.8	225.3	0.00	0.00	0.00	0.00	Chevron 6-19D BHL

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200' MD
210.0	0.20	156.64	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	156.64	240.0	-0.3	0.1	0.3	2.00	2.00	
270.0	1.40	156.64	270.0	-0.8	0.3	0.9	2.00	2.00	
300.0	2.00	156.64	300.0	-1.6	0.7	1.7	2.00	2.00	
330.0	2.60	156.64	330.0	-2.7	1.2	2.9	2.00	2.00	
360.0	3.20	156.64	359.9	-4.1	1.8	4.5	2.00	2.00	
390.0	3.80	156.64	389.9	-5.8	2.5	6.3	2.00	2.00	
420.0	4.40	156.64	419.8	-7.8	3.3	8.4	2.00	2.00	
450.0	5.00	156.64	449.7	-10.0	4.3	10.9	2.00	2.00	
475.2	5.50	156.64	474.8	-12.1	5.2	13.2	2.00	2.00	EOB; Inc=5.50°
480.0	5.50	156.64	479.6	-12.5	5.4	13.6	0.00	0.00	
510.0	5.50	156.64	509.4	-15.2	6.6	16.5	0.00	0.00	
540.0	5.50	156.64	539.3	-17.8	7.7	19.4	0.00	0.00	
570.0	5.50	156.64	569.1	-20.5	8.8	22.3	0.00	0.00	
600.0	5.50	156.64	599.0	-23.1	10.0	25.1	0.00	0.00	
630.0	5.50	156.64	628.9	-25.8	11.1	28.0	0.00	0.00	
660.0	5.50	156.64	658.7	-28.4	12.3	30.9	0.00	0.00	
690.0	5.50	156.64	688.6	-31.0	13.4	33.7	0.00	0.00	
720.0	5.50	156.64	718.4	-33.7	14.5	36.6	0.00	0.00	
750.0	5.50	156.64	748.3	-36.3	15.7	39.5	0.00	0.00	
780.0	5.50	156.64	778.2	-39.0	16.8	42.4	0.00	0.00	
810.0	5.50	156.64	808.0	-41.6	18.0	45.2	0.00	0.00	
840.0	5.50	156.64	837.9	-44.2	19.1	48.1	0.00	0.00	
870.0	5.50	156.64	867.8	-46.9	20.3	51.0	0.00	0.00	
900.0	5.50	156.64	897.6	-49.5	21.4	53.9	0.00	0.00	
930.0	5.50	156.64	927.5	-52.2	22.5	56.7	0.00	0.00	
960.0	5.50	156.64	957.3	-54.8	23.7	59.6	0.00	0.00	
990.0	5.50	156.64	987.2	-57.5	24.8	62.5	0.00	0.00	
1,020.0	5.50	156.64	1,017.1	-60.1	26.0	65.3	0.00	0.00	
1,050.0	5.50	156.64	1,046.9	-62.7	27.1	68.2	0.00	0.00	
1,080.0	5.50	156.64	1,076.8	-65.4	28.2	71.1	0.00	0.00	
1,110.0	5.50	156.64	1,106.7	-68.0	29.4	74.0	0.00	0.00	
1,140.0	5.50	156.64	1,136.5	-70.7	30.5	76.8	0.00	0.00	
1,170.0	5.50	156.64	1,166.4	-73.3	31.7	79.7	0.00	0.00	
1,200.0	5.50	156.64	1,196.2	-75.9	32.8	82.6	0.00	0.00	
1,230.0	5.50	156.64	1,226.1	-78.6	33.9	85.4	0.00	0.00	
1,260.0	5.50	156.64	1,256.0	-81.2	35.1	88.3	0.00	0.00	
1,290.0	5.50	156.64	1,285.8	-83.9	36.2	91.2	0.00	0.00	
1,320.0	5.50	156.64	1,315.7	-86.5	37.4	94.1	0.00	0.00	
1,350.0	5.50	156.64	1,345.5	-89.1	38.5	96.9	0.00	0.00	
1,380.0	5.50	156.64	1,375.4	-91.8	39.6	99.8	0.00	0.00	
1,410.0	5.50	156.64	1,405.3	-94.4	40.8	102.7	0.00	0.00	
1,440.0	5.50	156.64	1,435.1	-97.1	41.9	105.5	0.00	0.00	
1,470.0	5.50	156.64	1,465.0	-99.7	43.1	108.4	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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
1,500.0	5.50	156.64	1,494.9	-102.4	44.2	111.3	0.00	0.00	
1,530.0	5.50	156.64	1,524.7	-105.0	45.4	114.2	0.00	0.00	
1,560.0	5.50	156.64	1,554.6	-107.6	46.5	117.0	0.00	0.00	
1,590.0	5.50	156.64	1,584.4	-110.3	47.6	119.9	0.00	0.00	
1,620.0	5.50	156.64	1,614.3	-112.9	48.8	122.8	0.00	0.00	
1,650.0	5.50	156.64	1,644.2	-115.6	49.9	125.7	0.00	0.00	
1,680.0	5.50	156.64	1,674.0	-118.2	51.1	128.5	0.00	0.00	
1,710.0	5.50	156.64	1,703.9	-120.8	52.2	131.4	0.00	0.00	
1,740.0	5.50	156.64	1,733.7	-123.5	53.3	134.3	0.00	0.00	
1,770.0	5.50	156.64	1,763.6	-126.1	54.5	137.1	0.00	0.00	
1,800.0	5.50	156.64	1,793.5	-128.8	55.6	140.0	0.00	0.00	
1,830.0	5.50	156.64	1,823.3	-131.4	56.8	142.9	0.00	0.00	
1,860.0	5.50	156.64	1,853.2	-134.1	57.9	145.8	0.00	0.00	
1,890.0	5.50	156.64	1,883.1	-136.7	59.0	148.6	0.00	0.00	
1,920.0	5.50	156.64	1,912.9	-139.3	60.2	151.5	0.00	0.00	
1,950.0	5.50	156.64	1,942.8	-142.0	61.3	154.4	0.00	0.00	
1,980.0	5.50	156.64	1,972.6	-144.6	62.5	157.2	0.00	0.00	
2,010.0	5.50	156.64	2,002.5	-147.3	63.6	160.1	0.00	0.00	
2,040.0	5.50	156.64	2,032.4	-149.9	64.7	163.0	0.00	0.00	
2,070.0	5.50	156.64	2,062.2	-152.5	65.9	165.9	0.00	0.00	
2,100.0	5.50	156.64	2,092.1	-155.2	67.0	168.7	0.00	0.00	
2,130.0	5.50	156.64	2,121.9	-157.8	68.2	171.6	0.00	0.00	
2,160.0	5.50	156.64	2,151.8	-160.5	69.3	174.5	0.00	0.00	
2,190.0	5.50	156.64	2,181.7	-163.1	70.5	177.4	0.00	0.00	
2,220.0	5.50	156.64	2,211.5	-165.7	71.6	180.2	0.00	0.00	
2,250.0	5.50	156.64	2,241.4	-168.4	72.7	183.1	0.00	0.00	
2,280.0	5.50	156.64	2,271.3	-171.0	73.9	186.0	0.00	0.00	
2,310.0	5.50	156.64	2,301.1	-173.7	75.0	188.8	0.00	0.00	
2,340.0	5.50	156.64	2,331.0	-176.3	76.2	191.7	0.00	0.00	
2,370.0	5.50	156.64	2,360.8	-179.0	77.3	194.6	0.00	0.00	
2,400.0	5.50	156.64	2,390.7	-181.6	78.4	197.5	0.00	0.00	
2,430.0	5.50	156.64	2,420.6	-184.2	79.6	200.3	0.00	0.00	
2,460.0	5.50	156.64	2,450.4	-186.9	80.7	203.2	0.00	0.00	
2,490.0	5.50	156.64	2,480.3	-189.5	81.9	206.1	0.00	0.00	

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Chevron 6-19D BHL	0.00	0.00	10,029.0	-621.8	225.3	1,637,950.21	2,252,228.05	39.554980	-108.152405
- plan misses target center by 7562.4ft at 2490.0ft MD (2480.3 TVD, -189.5 N, 81.9 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
Chevron 6-19D TOG	0.00	0.00	7,279.0	-601.8	259.9	1,637,969.15	2,252,263.28	39.555035	-108.152282
- plan misses target center by 4819.7ft at 2490.0ft MD (2480.3 TVD, -189.5 N, 81.9 E)									
- Point									

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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	5.50	156.64	2,490.2	-190.4	82.2	207.0	0.00	0.00	
2,600.0	5.50	156.64	2,589.8	-199.2	86.0	216.6	0.00	0.00	
2,700.0	5.50	156.64	2,689.3	-208.0	89.9	226.2	0.00	0.00	
2,800.0	5.50	156.64	2,788.9	-216.8	93.7	235.7	0.00	0.00	
2,900.0	5.50	156.64	2,888.4	-225.6	97.5	245.3	0.00	0.00	
3,000.0	5.50	156.64	2,987.9	-234.4	101.3	254.9	0.00	0.00	
3,100.0	5.50	156.64	3,087.5	-243.2	105.1	264.5	0.00	0.00	
3,200.0	5.50	156.64	3,187.0	-252.0	108.9	274.0	0.00	0.00	
3,222.1	5.50	156.64	3,209.0	-254.0	109.7	276.2	0.00	0.00	Wasatch
3,300.0	5.50	156.64	3,286.6	-260.8	112.7	283.6	0.00	0.00	
3,400.0	5.50	156.64	3,386.1	-269.6	116.5	293.2	0.00	0.00	
3,500.0	5.50	156.64	3,485.6	-278.4	120.3	302.8	0.00	0.00	
3,600.0	5.50	156.64	3,585.2	-287.2	124.1	312.3	0.00	0.00	
3,700.0	5.50	156.64	3,684.7	-296.1	127.9	321.9	0.00	0.00	
3,800.0	5.50	156.64	3,784.3	-304.9	131.7	331.5	0.00	0.00	
3,900.0	5.50	156.64	3,883.8	-313.7	135.5	341.1	0.00	0.00	
4,000.0	5.50	156.64	3,983.3	-322.5	139.3	350.6	0.00	0.00	
4,100.0	5.50	156.64	4,082.9	-331.3	143.1	360.2	0.00	0.00	
4,200.0	5.50	156.64	4,182.4	-340.1	146.9	369.8	0.00	0.00	
4,300.0	5.50	156.64	4,281.9	-348.9	150.7	379.4	0.00	0.00	
4,400.0	5.50	156.64	4,381.5	-357.7	154.5	388.9	0.00	0.00	
4,500.0	5.50	156.64	4,481.0	-366.5	158.3	398.5	0.00	0.00	
4,600.0	5.50	156.64	4,580.6	-375.3	162.1	408.1	0.00	0.00	
4,700.0	5.50	156.64	4,680.1	-384.1	165.9	417.6	0.00	0.00	
4,800.0	5.50	156.64	4,779.6	-392.9	169.7	427.2	0.00	0.00	
4,900.0	5.50	156.64	4,879.2	-401.7	173.5	436.8	0.00	0.00	
5,000.0	5.50	156.64	4,978.7	-410.5	177.3	446.4	0.00	0.00	
5,100.0	5.50	156.64	5,078.3	-419.3	181.1	455.9	0.00	0.00	
5,171.1	5.50	156.64	5,149.0	-425.6	183.8	462.7	0.00	0.00	Fort Union
5,200.0	5.50	156.64	5,177.8	-428.1	184.9	465.5	0.00	0.00	
5,300.0	5.50	156.64	5,277.3	-436.9	188.7	475.1	0.00	0.00	
5,400.0	5.50	156.64	5,376.9	-445.7	192.5	484.7	0.00	0.00	
5,500.0	5.50	156.64	5,476.4	-454.5	196.3	494.2	0.00	0.00	
5,600.0	5.50	156.64	5,576.0	-463.3	200.1	503.8	0.00	0.00	
5,673.4	5.50	156.64	5,649.0	-469.8	202.9	510.8	0.00	0.00	Base Ft Union
5,700.0	5.50	156.64	5,675.5	-472.1	203.9	513.4	0.00	0.00	
5,800.0	5.50	156.64	5,775.0	-480.9	207.7	523.0	0.00	0.00	
5,900.0	5.50	156.64	5,874.6	-489.8	211.6	532.5	0.00	0.00	
6,000.0	5.50	156.64	5,974.1	-498.6	215.4	542.1	0.00	0.00	
6,100.0	5.50	156.64	6,073.6	-507.4	219.2	551.7	0.00	0.00	
6,200.0	5.50	156.64	6,173.2	-516.2	223.0	561.2	0.00	0.00	
6,300.0	5.50	156.64	6,272.7	-525.0	226.8	570.8	0.00	0.00	
6,400.0	5.50	156.64	6,372.3	-533.8	230.6	580.4	0.00	0.00	
6,500.0	5.50	156.64	6,471.8	-542.6	234.4	590.0	0.00	0.00	
6,600.0	5.50	156.64	6,571.3	-551.4	238.2	599.5	0.00	0.00	
6,700.0	5.50	156.64	6,670.9	-560.2	242.0	609.1	0.00	0.00	
6,800.0	5.50	156.64	6,770.4	-569.0	245.8	618.7	0.00	0.00	
6,900.0	5.50	156.64	6,870.0	-577.8	249.6	628.3	0.00	0.00	
6,909.1	5.50	156.64	6,879.0	-578.6	249.9	629.1	0.00	0.00	Ohio Creek
7,000.0	5.50	156.64	6,969.5	-586.6	253.4	637.8	0.00	0.00	
7,034.9	5.50	156.64	7,004.2	-589.7	254.7	641.2	0.00	0.00	Start Drop -2.00
7,100.0	4.20	156.64	7,069.1	-594.7	256.9	646.7	2.00	-2.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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
7,109.9	4.00	156.64	7,079.0	-595.4	257.2	647.4	2.00	-2.00	Williams Fork
7,200.0	2.20	156.64	7,168.9	-599.9	259.1	652.2	2.00	-2.00	
7,300.0	0.20	156.64	7,268.9	-601.8	259.9	654.3	2.00	-2.00	
7,310.1	0.00	0.00	7,279.0	-601.8	259.9	654.4	2.00	-2.00	EOD; Inc=0° - TOG - Chevron 6-19D TOG
7,400.0	0.22	240.06	7,368.9	-601.9	259.8	654.4	0.25	0.25	
7,500.0	0.47	240.06	7,468.9	-602.2	259.3	654.5	0.25	0.25	
7,600.0	0.72	240.06	7,568.9	-602.7	258.4	654.7	0.25	0.25	
7,666.5	0.89	240.06	7,635.4	-603.2	257.5	654.8	0.25	0.25	
7,700.0	0.89	240.06	7,668.9	-603.4	257.1	654.9	0.00	0.00	
7,800.0	0.89	240.06	7,768.9	-604.2	255.7	655.2	0.00	0.00	
7,900.0	0.89	240.06	7,868.9	-605.0	254.4	655.5	0.00	0.00	
8,000.0	0.89	240.06	7,968.9	-605.8	253.1	655.7	0.00	0.00	
8,100.0	0.89	240.06	8,068.8	-606.5	251.7	656.0	0.00	0.00	
8,200.0	0.89	240.06	8,168.8	-607.3	250.4	656.3	0.00	0.00	
8,300.0	0.89	240.06	8,268.8	-608.1	249.0	656.6	0.00	0.00	
8,400.0	0.89	240.06	8,368.8	-608.9	247.7	656.8	0.00	0.00	
8,500.0	0.89	240.06	8,468.8	-609.7	246.3	657.1	0.00	0.00	
8,600.0	0.89	240.06	8,568.8	-610.4	245.0	657.4	0.00	0.00	
8,700.0	0.89	240.06	8,668.8	-611.2	243.6	657.6	0.00	0.00	
8,800.0	0.89	240.06	8,768.8	-612.0	242.3	657.9	0.00	0.00	
8,900.0	0.89	240.06	8,868.8	-612.8	240.9	658.2	0.00	0.00	
9,000.0	0.89	240.06	8,968.7	-613.5	239.6	658.4	0.00	0.00	
9,100.0	0.89	240.06	9,068.7	-614.3	238.2	658.7	0.00	0.00	
9,200.0	0.89	240.06	9,168.7	-615.1	236.9	659.0	0.00	0.00	
9,300.0	0.89	240.06	9,268.7	-615.9	235.5	659.3	0.00	0.00	
9,400.0	0.89	240.06	9,368.7	-616.6	234.2	659.5	0.00	0.00	
9,460.3	0.89	240.06	9,429.0	-617.1	233.4	659.7	0.00	0.00	Cameo
9,500.0	0.89	240.06	9,468.7	-617.4	232.8	659.8	0.00	0.00	
9,600.0	0.89	240.06	9,568.7	-618.2	231.5	660.1	0.00	0.00	
9,700.0	0.89	240.06	9,668.7	-619.0	230.1	660.3	0.00	0.00	
9,800.0	0.89	240.06	9,768.6	-619.7	228.8	660.6	0.00	0.00	
9,900.0	0.89	240.06	9,868.6	-620.5	227.5	660.9	0.00	0.00	
9,910.4	0.89	240.06	9,879.0	-620.6	227.3	660.9	0.00	0.00	Rollins
10,000.0	0.89	240.06	9,968.6	-621.3	226.1	661.2	0.00	0.00	
10,060.4	0.89	240.06	10,029.0	-621.8	225.3	661.3	0.00	0.00	Chevron 6-19D BHL

Targets									
Target Name									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
Chevron 6-19D BHL	0.00	0.00	10,029.0	-621.8	225.3	1,637,950.21	2,252,228.05	39.554980	-108.152405
- plan hits target center									
- Rectangle (sides W50.0 H100.0 D0.0)									
Chevron 6-19D TOG	0.00	0.00	7,279.0	-601.8	259.9	1,637,969.15	2,252,263.28	39.555035	-108.152282
- plan hits target center									
- Point									

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,222.1	3,209.0	Wasatch		0.00		
5,171.1	5,149.0	Fort Union		0.00		
5,673.4	5,649.0	Base Ft Union		0.00		
6,909.1	6,879.0	Ohio Creek		0.00		
7,109.9	7,079.0	Williams Fork		0.00		
7,310.1	7,279.0	TOG		0.00		
9,460.3	9,429.0	Cameo		0.00		
9,910.4	9,879.0	Rollins		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200' MD	
475.2	474.8	-12.1	5.2	EOB; Inc=5.50°	
7,034.9	7,004.2	-589.7	254.7	Start Drop -2.00	
7,310.1	7,279.0	-601.8	259.9	EOD; Inc=0°	
10,060.4	10,029.0	-603.2	257.5	TD at 10060.4	

Berry Petroleum Company (NAD 83)

Garfield County

Sec 6 T6S R96W (F06 696)

Chevron 6-19D

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 6-19D
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 6-19D	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	10,060.4	Plan #2 (DD)	MWD	Geolink MWD	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Chevron O06 Pad						
Chevron 6-17D (O06 Pad) - DD - Plan #1	7,338.5	7,315.3	1,047.0	1,016.7	34.541	CC
Chevron 6-17D (O06 Pad) - DD - Plan #1	7,800.0	7,768.2	1,047.3	1,015.6	33.002	ES
Chevron 6-17D (O06 Pad) - DD - Plan #1	10,061.3	10,023.8	1,064.4	1,024.7	26.840	SF
Chevron 6-18D (O06 Pad) - DD - Plan #1	7,342.7	7,350.1	743.0	716.0	27.485	CC
Chevron 6-18D (O06 Pad) - DD - Plan #1	8,000.0	8,001.7	743.7	714.4	25.385	ES
Chevron 6-18D (O06 Pad) - DD - Plan #1	10,061.3	10,061.9	754.8	717.7	20.369	SF
Sec 6 T6S R96W (F06 696)						
Chevron 6-20D - DD - Plan #2	200.0	200.0	15.0	14.4	24.189	CC, ES
Chevron 6-20D - DD - Plan #2	5,100.0	5,097.6	196.2	174.2	8.914	SF
Chevron 6-21D - DD - Plan #2	200.0	200.0	15.0	14.4	24.189	CC
Chevron 6-21D - DD - Plan #2	300.0	299.6	15.3	14.4	15.737	ES
Chevron 6-21D - DD - Plan #2	600.0	598.4	21.3	19.1	9.608	SF
Chevron 6-22D - DD - Plan #3	200.0	200.0	30.2	29.6	48.580	CC, ES
Chevron 6-22D - DD - Plan #3	10,061.3	10,043.1	654.2	618.5	18.335	SF
Chevron 6-23D - DD - Plan #2	200.0	200.0	59.0	58.4	94.997	CC, ES
Chevron 6-23D - DD - Plan #2	10,061.3	10,049.5	920.9	884.8	25.476	SF
Chevron 6-25D - DD - DD	0.0	0.0	44.0			
Chevron 6-25D - DD - DD	500.0	491.4	75.5	73.8	44.760	SF
Chevron 6-32D - DD - Plan #2	200.0	200.0	119.9	119.3	192.971	CC, ES
Chevron 6-32D - DD - Plan #2	5,900.0	5,753.0	1,218.7	1,192.0	45.612	SF
Chevron 6-33D - DD - Plan #2	389.9	386.7	103.4	102.1	79.746	CC
Chevron 6-33D - DD - Plan #2	400.0	396.4	103.4	102.1	77.566	ES
Chevron 6-33D - DD - Plan #2	6,400.0	6,265.5	1,220.3	1,191.4	42.226	SF
Chevron 6-34D - DD - Plan #2	577.9	574.9	82.0	80.0	40.198	CC, ES
Chevron 6-34D - DD - Plan #2	900.0	884.9	104.9	101.6	31.327	SF
Chevron 6-35D - DD - Plan #2	404.9	402.6	73.1	71.8	53.921	CC, ES
Chevron 6-35D - DD - Plan #2	700.0	687.6	91.4	88.9	36.075	SF
Chevron 6-36D - DD - Plan #2	200.0	200.0	60.0	59.3	96.485	CC
Chevron 6-36D - DD - Plan #2	300.0	298.8	60.1	59.1	61.690	ES
Chevron 6-36D - DD - Plan #2	600.0	590.6	76.5	74.3	35.552	SF
Chevron 6-37D - DD - Plan #2	423.1	421.9	42.5	41.1	29.650	CC, ES
Chevron 6-37D - DD - Plan #2	600.0	594.8	51.8	49.7	24.211	SF
Chevron 6-38D - DD - Plan #2	348.2	347.8	29.1	28.0	25.072	CC, ES
Chevron 6-38D - DD - Plan #2	500.0	496.9	36.9	35.1	21.054	SF

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
6,300.0	6,272.7	6,434.2	6,360.4	14.9	19.9	14.00	-1,713.5	427.8	1,216.0	1,190.2	25.80	47.127		
6,400.0	6,372.3	6,531.0	6,456.0	15.1	20.2	14.55	-1,702.5	416.9	1,193.7	1,167.4	26.32	45.358		
6,500.0	6,471.8	6,627.8	6,551.6	15.4	20.5	15.12	-1,691.5	406.0	1,171.6	1,144.7	26.84	43.647		
6,600.0	6,571.3	6,724.7	6,647.1	15.6	20.8	15.71	-1,680.5	395.1	1,149.5	1,122.2	27.38	41.992		
6,700.0	6,670.9	6,814.3	6,735.7	15.8	21.1	16.28	-1,670.3	385.0	1,127.7	1,099.8	27.89	40.431		
6,800.0	6,770.4	6,900.0	6,820.4	16.1	21.4	16.80	-1,661.5	376.2	1,107.0	1,078.7	28.37	39.018		
6,900.0	6,870.0	6,969.1	6,889.0	16.3	21.6	17.18	-1,655.7	370.4	1,088.5	1,059.7	28.77	37.834		
7,000.0	6,969.5	7,044.9	6,964.5	16.6	21.7	17.53	-1,650.7	365.5	1,072.1	1,042.9	29.17	36.757		
7,100.0	7,069.1	7,121.6	7,041.0	16.8	21.8	17.76	-1,647.1	361.8	1,058.5	1,028.9	29.56	35.811		
7,200.0	7,168.9	7,200.0	7,119.4	17.0	21.9	17.89	-1,644.8	359.7	1,050.1	1,020.1	29.91	35.112		
7,300.0	7,268.9	7,277.5	7,196.9	17.1	22.0	17.94	-1,644.2	359.0	1,047.1	1,016.9	30.20	34.676		
7,338.5	7,307.5	7,315.3	7,234.7	17.2	22.1	-14.80	-1,644.2	358.9	1,047.0	1,016.7	30.31	34.541 CC		
7,400.0	7,368.9	7,375.6	7,295.0	17.2	22.1	-65.49	-1,644.3	358.8	1,047.1	1,016.6	30.50	34.335		
7,500.0	7,468.9	7,473.8	7,393.1	17.4	22.2	-65.49	-1,644.6	358.2	1,047.1	1,016.3	30.80	33.998		
7,600.0	7,568.9	7,571.9	7,491.3	17.5	22.3	-65.48	-1,645.1	357.3	1,047.1	1,016.0	31.10	33.664		
7,700.0	7,668.9	7,670.1	7,589.4	17.6	22.4	-65.48	-1,645.9	356.0	1,047.1	1,015.7	31.42	33.332		
7,800.0	7,768.9	7,768.2	7,687.5	17.8	22.6	-65.46	-1,646.8	354.4	1,047.3	1,015.6	31.73	33.002 ES		
7,900.0	7,868.9	7,866.3	7,785.6	17.9	22.7	-65.42	-1,648.0	352.3	1,047.6	1,015.6	32.06	32.675		
8,000.0	7,968.9	7,964.5	7,883.7	18.0	22.8	-65.36	-1,649.3	350.0	1,048.1	1,015.7	32.40	32.350		
8,100.0	8,068.8	8,062.8	7,982.0	18.2	22.9	-65.28	-1,650.9	347.2	1,048.8	1,016.1	32.74	32.031		
8,200.0	8,168.8	8,162.8	8,081.9	18.3	23.0	-65.19	-1,652.6	344.3	1,049.6	1,016.5	33.10	31.714		
8,300.0	8,268.8	8,262.8	8,181.8	18.5	23.1	-65.10	-1,654.3	341.4	1,050.4	1,016.9	33.45	31.405		
8,400.0	8,368.8	8,362.7	8,281.8	18.6	23.3	-65.01	-1,656.0	338.4	1,051.2	1,017.4	33.80	31.101		
8,500.0	8,468.8	8,462.7	8,381.7	18.7	23.4	-64.92	-1,657.7	335.5	1,051.9	1,017.8	34.15	30.804		
8,600.0	8,568.8	8,562.7	8,481.6	18.9	23.5	-64.83	-1,659.4	332.6	1,052.7	1,018.2	34.50	30.512		
8,700.0	8,668.8	8,662.7	8,581.5	19.0	23.6	-64.74	-1,661.1	329.6	1,053.5	1,018.6	34.85	30.227		
8,800.0	8,768.8	8,762.7	8,681.5	19.2	23.8	-64.65	-1,662.8	326.7	1,054.3	1,019.1	35.20	29.947		
8,900.0	8,868.8	8,862.7	8,781.4	19.3	23.9	-64.56	-1,664.4	323.8	1,055.1	1,019.5	35.56	29.672		
9,000.0	8,968.7	8,962.6	8,881.3	19.4	24.0	-64.47	-1,666.1	320.8	1,055.8	1,019.9	35.91	29.403		
9,100.0	9,068.7	9,062.6	8,981.2	19.6	24.1	-64.38	-1,667.8	317.9	1,056.6	1,020.4	36.26	29.139		
9,200.0	9,168.7	9,162.6	9,081.2	19.7	24.3	-64.29	-1,669.5	315.0	1,057.4	1,020.8	36.61	28.880		
9,300.0	9,268.7	9,262.6	9,181.1	19.9	24.4	-64.20	-1,671.2	312.0	1,058.2	1,021.3	36.97	28.626		
9,400.0	9,368.7	9,362.6	9,281.0	20.0	24.5	-64.11	-1,672.9	309.1	1,059.0	1,021.7	37.32	28.377		
9,500.0	9,468.7	9,462.6	9,380.9	20.2	24.6	-64.02	-1,674.6	306.2	1,059.8	1,022.2	37.67	28.132		
9,600.0	9,568.7	9,562.5	9,480.9	20.3	24.8	-63.93	-1,676.3	303.2	1,060.6	1,022.6	38.03	27.892		
9,700.0	9,668.7	9,662.5	9,580.8	20.5	24.9	-63.84	-1,678.0	300.3	1,061.4	1,023.1	38.38	27.657		
9,800.0	9,768.6	9,762.5	9,680.7	20.6	25.0	-63.76	-1,679.7	297.4	1,062.3	1,023.5	38.73	27.425		
9,900.0	9,868.6	9,862.5	9,780.7	20.8	25.2	-63.67	-1,681.3	294.4	1,063.1	1,024.0	39.09	27.198		
10,000.0	9,968.6	9,962.5	9,880.6	20.9	25.3	-63.58	-1,683.0	291.5	1,063.9	1,024.4	39.44	26.975		
10,061.3	10,030.0	10,023.8	9,941.9	21.0	25.4	-63.52	-1,684.1	289.7	1,064.4	1,024.7	39.66	26.840 SF		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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 O06 Pad - Chevron 6-18D (O06 Pad) - DD - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: O-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,300.0	5,277.3	5,512.2	5,426.5	12.5	19.1	3.68	-1,565.0	594.0	1,218.9	1,199.7	19.20	63.475		
5,400.0	5,376.9	5,608.2	5,520.9	12.7	19.5	3.89	-1,549.9	584.8	1,191.5	1,171.9	19.58	60.862		
5,500.0	5,476.4	5,704.3	5,615.3	12.9	19.8	4.11	-1,534.7	575.5	1,164.0	1,144.1	19.95	58.340		
5,600.0	5,576.0	5,800.3	5,709.7	13.2	20.2	4.34	-1,519.5	566.2	1,136.6	1,116.3	20.33	55.906		
5,700.0	5,675.5	5,896.4	5,804.1	13.4	20.5	4.58	-1,504.3	557.0	1,109.2	1,088.5	20.71	53.554		
5,800.0	5,775.0	5,992.5	5,898.5	13.7	20.9	4.83	-1,489.1	547.7	1,081.8	1,060.7	21.10	51.279		
5,900.0	5,874.6	6,088.5	5,992.9	13.9	21.2	5.10	-1,473.9	538.5	1,054.4	1,032.9	21.48	49.080		
6,000.0	5,974.1	6,184.6	6,087.3	14.2	21.6	5.38	-1,458.8	529.2	1,027.0	1,005.2	21.87	46.950		
6,100.0	6,073.6	6,280.6	6,181.7	14.4	21.9	5.68	-1,443.6	520.0	999.7	977.4	22.27	44.889		
6,200.0	6,173.2	6,376.7	6,276.1	14.6	22.3	5.99	-1,428.4	510.7	972.4	949.7	22.67	42.891		
6,300.0	6,272.7	6,472.8	6,370.5	14.9	22.6	6.32	-1,413.2	501.4	945.1	922.0	23.08	40.955		
6,400.0	6,372.3	6,568.8	6,464.9	15.1	23.0	6.67	-1,398.0	492.2	917.9	894.4	23.49	39.077		
6,500.0	6,471.8	6,664.9	6,559.3	15.4	23.4	7.04	-1,382.9	482.9	890.7	866.8	23.91	37.255		
6,600.0	6,571.3	6,761.0	6,653.7	15.6	23.7	7.43	-1,367.7	473.7	863.5	839.2	24.33	35.487		
6,700.0	6,670.9	6,841.5	6,733.0	15.8	24.0	7.77	-1,355.4	466.2	837.0	812.3	24.72	33.861		
6,800.0	6,770.4	6,917.4	6,807.9	16.1	24.2	8.07	-1,345.5	460.1	812.9	787.8	25.09	32.404		
6,900.0	6,870.0	7,000.0	6,889.9	16.3	24.4	8.37	-1,336.6	454.7	791.4	765.9	25.47	31.078		
7,000.0	6,969.5	7,071.9	6,961.5	16.6	24.6	8.59	-1,330.5	451.0	772.4	746.6	25.81	29.929		
7,100.0	7,069.1	7,150.5	7,039.9	16.8	24.7	8.77	-1,325.7	448.0	756.7	730.5	26.19	28.894		
7,200.0	7,168.9	7,230.1	7,119.3	17.0	24.8	8.87	-1,322.6	446.2	746.9	720.3	26.56	28.121		
7,300.0	7,268.9	7,310.1	7,199.3	17.1	24.9	8.91	-1,321.4	445.5	743.1	716.3	26.90	27.631		
7,342.7	7,311.6	7,350.1	7,239.3	17.2	24.9	-28.07	-1,321.4	445.4	743.0	716.0	27.03	27.485 CC		
7,400.0	7,368.9	7,406.9	7,296.2	17.2	25.0	-74.52	-1,321.5	445.3	743.1	715.9	27.22	27.296		
7,500.0	7,468.9	7,506.1	7,395.3	17.4	25.1	-74.52	-1,321.8	444.8	743.1	715.5	27.56	26.966		
7,600.0	7,568.9	7,605.2	7,494.4	17.5	25.1	-74.52	-1,322.3	443.9	743.1	715.2	27.89	26.642		
7,660.8	7,629.7	7,665.5	7,554.7	17.6	25.2	-74.52	-1,322.7	443.2	743.1	715.0	28.10	26.447		
7,700.0	7,668.9	7,704.3	7,593.6	17.6	25.2	-74.52	-1,323.0	442.6	743.1	714.9	28.23	26.322		
7,800.0	7,768.9	7,803.5	7,692.7	17.8	25.3	-74.50	-1,323.9	441.0	743.2	714.6	28.58	26.006		
7,900.0	7,868.9	7,902.6	7,791.8	17.9	25.4	-74.44	-1,325.1	439.0	743.4	714.5	28.93	25.693		
8,000.0	7,968.9	8,001.7	7,890.9	18.0	25.5	-74.35	-1,326.5	436.7	743.7	714.4	29.30	25.385 ES		
8,100.0	8,068.8	8,100.9	7,990.0	18.2	25.6	-74.23	-1,328.0	433.9	744.2	714.5	29.67	25.081		
8,200.0	8,168.8	8,200.9	8,089.9	18.3	25.7	-74.10	-1,329.7	431.0	744.7	714.6	30.05	24.783		
8,300.0	8,268.8	8,300.9	8,189.8	18.5	25.8	-73.96	-1,331.4	428.0	745.2	714.8	30.42	24.492		
8,400.0	8,368.8	8,400.8	8,289.8	18.6	25.9	-73.82	-1,333.1	425.1	745.7	714.9	30.80	24.209		
8,500.0	8,468.8	8,500.8	8,389.7	18.7	26.0	-73.69	-1,334.8	422.2	746.2	715.0	31.18	23.933		
8,600.0	8,568.8	8,600.8	8,489.6	18.9	26.1	-73.55	-1,336.5	419.2	746.7	715.2	31.56	23.664		
8,700.0	8,668.8	8,700.8	8,589.5	19.0	26.2	-73.42	-1,338.2	416.3	747.2	715.3	31.93	23.401		
8,800.0	8,768.8	8,800.8	8,689.5	19.2	26.3	-73.29	-1,339.9	413.4	747.8	715.5	32.31	23.144		
8,900.0	8,868.8	8,900.8	8,789.4	19.3	26.4	-73.15	-1,341.6	410.4	748.3	715.6	32.69	22.894		
9,000.0	8,968.7	9,000.7	8,889.3	19.4	26.5	-73.02	-1,343.3	407.5	748.8	715.8	33.06	22.649		
9,100.0	9,068.7	9,100.7	8,989.2	19.6	26.6	-72.88	-1,344.9	404.6	749.4	715.9	33.44	22.410		
9,200.0	9,168.7	9,200.7	9,089.2	19.7	26.7	-72.75	-1,346.6	401.6	749.9	716.1	33.82	22.177		
9,300.0	9,268.7	9,300.7	9,189.1	19.9	26.9	-72.62	-1,348.3	398.7	750.5	716.3	34.19	21.949		
9,400.0	9,368.7	9,400.7	9,289.0	20.0	27.0	-72.48	-1,350.0	395.8	751.0	716.4	34.57	21.726		
9,500.0	9,468.7	9,500.7	9,389.0	20.2	27.1	-72.35	-1,351.7	392.8	751.6	716.6	34.94	21.508		
9,600.0	9,568.7	9,600.6	9,488.9	20.3	27.2	-72.22	-1,353.4	389.9	752.1	716.8	35.32	21.294		
9,700.0	9,668.7	9,700.6	9,588.8	20.5	27.3	-72.08	-1,355.1	387.0	752.7	717.0	35.70	21.086		
9,800.0	9,768.6	9,800.6	9,688.7	20.6	27.4	-71.95	-1,356.8	384.0	753.3	717.2	36.07	20.882		
9,900.0	9,868.6	9,900.6	9,788.7	20.8	27.5	-71.82	-1,358.5	381.1	753.8	717.4	36.45	20.682		
10,000.0	9,968.6	10,000.6	9,888.6	20.9	27.6	-71.69	-1,360.2	378.2	754.4	717.6	36.82	20.486		
10,061.3	10,030.0	10,061.9	9,949.9	21.0	27.7	-71.61	-1,361.2	376.4	754.8	717.7	37.05	20.369 SF		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	36.89	12.0	9.0	15.0					
100.0	100.0	100.0	100.0	0.1	0.1	36.89	12.0	9.0	15.0	14.8	0.27	55.201		
200.0	200.0	200.0	200.0	0.3	0.3	36.89	12.0	9.0	15.0	14.4	0.62	24.189 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-125.17	12.0	9.0	16.0	15.0	0.97	16.414		
400.0	399.8	399.8	399.8	0.7	0.7	-137.82	12.0	9.0	19.5	18.1	1.33	14.636		
500.0	499.5	499.5	499.5	0.9	0.8	-150.36	12.0	9.0	26.5	24.8	1.68	15.738		
600.0	599.0	599.8	599.8	1.1	1.0	-156.10	10.8	10.3	33.9	31.9	2.04	16.663		
700.0	698.5	700.6	700.4	1.4	1.2	-156.22	7.1	14.1	39.1	36.7	2.40	16.270		
800.0	798.1	800.9	800.4	1.6	1.4	-153.44	1.5	20.0	42.3	39.5	2.79	15.167		
900.0	897.6	900.9	900.0	1.8	1.6	-150.76	-4.4	26.1	45.4	42.2	3.19	14.245		
1,000.0	997.2	1,000.8	999.6	2.1	1.8	-148.42	-10.3	32.2	48.6	45.0	3.60	13.513		
1,100.0	1,096.7	1,100.7	1,099.1	2.3	2.0	-146.38	-16.2	38.2	51.9	47.9	4.01	12.923		
1,200.0	1,196.2	1,200.6	1,198.7	2.6	2.3	-144.58	-22.0	44.3	55.2	50.8	4.44	12.438		
1,300.0	1,295.8	1,300.6	1,298.3	2.8	2.5	-142.98	-27.9	50.4	58.6	53.7	4.87	12.034		
1,400.0	1,395.3	1,400.5	1,397.9	3.0	2.7	-141.56	-33.8	56.5	62.0	56.7	5.30	11.694		
1,500.0	1,494.9	1,500.4	1,497.4	3.3	2.9	-140.29	-39.6	62.6	65.4	59.7	5.74	11.404		
1,600.0	1,594.4	1,600.4	1,597.0	3.5	3.1	-139.14	-45.5	68.7	68.9	62.7	6.17	11.155		
1,700.0	1,693.9	1,700.3	1,696.6	3.8	3.4	-138.11	-51.4	74.8	72.4	65.8	6.62	10.938		
1,800.0	1,793.5	1,800.2	1,796.1	4.0	3.6	-137.17	-57.3	80.9	75.9	68.8	7.06	10.749		
1,900.0	1,893.0	1,900.2	1,895.7	4.2	3.8	-136.31	-63.1	87.0	79.4	71.9	7.51	10.582		
2,000.0	1,992.5	2,000.1	1,995.3	4.5	4.0	-135.53	-69.0	93.1	83.0	75.0	7.95	10.434		
2,100.0	2,092.1	2,100.0	2,094.9	4.7	4.3	-134.81	-74.9	99.2	86.5	78.1	8.40	10.302		
2,200.0	2,191.6	2,200.0	2,194.4	5.0	4.5	-134.15	-80.8	105.3	90.1	81.3	8.85	10.184		
2,300.0	2,291.2	2,299.9	2,294.0	5.2	4.7	-133.54	-86.6	111.4	93.7	84.4	9.30	10.077		
2,400.0	2,390.7	2,399.8	2,393.6	5.5	5.0	-132.97	-92.5	117.5	97.3	87.6	9.75	9.981		
2,500.0	2,490.2	2,499.7	2,493.1	5.7	5.2	-132.45	-98.4	123.6	100.9	90.7	10.20	9.893		
2,600.0	2,589.8	2,599.7	2,592.7	5.9	5.4	-131.96	-104.3	129.6	104.5	93.9	10.65	9.813		
2,700.0	2,689.3	2,699.6	2,692.3	6.2	5.6	-131.50	-110.1	135.7	108.1	97.0	11.10	9.739		
2,800.0	2,788.9	2,799.5	2,791.9	6.4	5.9	-131.08	-116.0	141.8	111.8	100.2	11.56	9.672		
2,900.0	2,888.4	2,899.5	2,891.4	6.7	6.1	-130.68	-121.9	147.9	115.4	103.4	12.01	9.610		
3,000.0	2,987.9	2,999.4	2,991.0	6.9	6.3	-130.30	-127.7	154.0	119.0	106.6	12.46	9.553		
3,100.0	3,087.5	3,099.3	3,090.6	7.1	6.5	-129.95	-133.6	160.1	122.7	109.8	12.92	9.499		
3,200.0	3,187.0	3,199.3	3,190.1	7.4	6.8	-129.61	-139.5	166.2	126.3	113.0	13.37	9.450		
3,300.0	3,286.6	3,299.2	3,289.7	7.6	7.0	-129.30	-145.4	172.3	130.0	116.2	13.82	9.404		
3,400.0	3,386.1	3,399.1	3,389.3	7.9	7.2	-129.00	-151.2	178.4	133.6	119.4	14.28	9.361		
3,500.0	3,485.6	3,499.1	3,488.9	8.1	7.5	-128.72	-157.1	184.5	137.3	122.6	14.73	9.320		
3,600.0	3,585.2	3,599.0	3,588.4	8.4	7.7	-128.46	-163.0	190.6	141.0	125.8	15.19	9.283		
3,700.0	3,684.7	3,698.9	3,688.0	8.6	7.9	-128.20	-168.9	196.7	144.6	129.0	15.64	9.247		
3,800.0	3,784.3	3,798.8	3,787.6	8.8	8.1	-127.96	-174.7	202.8	148.3	132.2	16.10	9.214		
3,900.0	3,883.8	3,898.8	3,887.1	9.1	8.4	-127.73	-180.6	208.9	152.0	135.4	16.55	9.183		
4,000.0	3,983.3	3,998.7	3,986.7	9.3	8.6	-127.52	-186.5	214.9	155.7	138.6	17.01	9.153		
4,100.0	4,082.9	4,098.6	4,086.3	9.6	8.8	-127.31	-192.4	221.0	159.3	141.9	17.46	9.125		
4,200.0	4,182.4	4,198.6	4,185.9	9.8	9.1	-127.11	-198.2	227.1	163.0	145.1	17.92	9.098		
4,300.0	4,281.9	4,298.5	4,285.4	10.0	9.3	-126.92	-204.1	233.2	166.7	148.3	18.37	9.073		
4,400.0	4,381.5	4,398.4	4,385.0	10.3	9.5	-126.74	-210.0	239.3	170.4	151.5	18.83	9.049		
4,500.0	4,481.0	4,498.4	4,484.6	10.5	9.7	-126.56	-215.8	245.4	174.0	154.8	19.28	9.027		
4,600.0	4,580.6	4,598.3	4,584.2	10.8	10.0	-126.40	-221.7	251.5	177.7	158.0	19.74	9.005		
4,700.0	4,680.1	4,698.2	4,683.7	11.0	10.2	-126.24	-227.6	257.6	181.4	161.2	20.19	8.984		
4,800.0	4,779.6	4,798.2	4,783.3	11.3	10.4	-126.08	-233.5	263.7	185.1	164.5	20.65	8.965		
4,900.0	4,879.2	4,898.1	4,882.9	11.5	10.6	-125.94	-239.3	269.8	188.8	167.7	21.10	8.946		
5,000.0	4,978.7	4,998.0	4,982.4	11.7	10.9	-125.79	-245.2	275.9	192.5	170.9	21.56	8.928		
5,100.0	5,078.3	5,097.6	5,081.6	12.0	11.1	-125.69	-251.0	281.9	196.2	174.2	22.01	8.914 SF		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
5,200.0	5,177.8	5,195.9	5,179.8	12.2	11.3	-126.26	-255.0	286.1	200.5	178.1	22.37	8.961		
5,300.0	5,277.3	5,293.9	5,277.8	12.5	11.4	-127.72	-256.7	287.8	205.6	183.0	22.64	9.084		
5,400.0	5,376.9	5,393.6	5,377.5	12.7	11.6	-129.77	-256.8	287.8	211.5	188.7	22.85	9.257		
5,500.0	5,476.4	5,493.9	5,477.8	12.9	11.7	-131.80	-257.1	287.3	217.4	194.3	23.05	9.429		
5,600.0	5,576.0	5,593.6	5,577.5	13.2	11.8	-133.76	-257.6	286.5	223.2	199.9	23.25	9.601		
5,700.0	5,675.5	5,693.2	5,677.0	13.4	12.0	-135.62	-258.0	285.8	229.3	205.8	23.44	9.780		
5,800.0	5,775.0	5,792.7	5,776.6	13.7	12.1	-137.37	-258.4	285.1	235.6	211.9	23.64	9.965		
5,900.0	5,874.6	5,892.3	5,876.1	13.9	12.3	-139.04	-258.8	284.3	242.1	218.3	23.84	10.154		
6,000.0	5,974.1	5,991.8	5,975.7	14.2	12.4	-140.62	-259.3	283.6	248.8	224.8	24.05	10.346		
6,100.0	6,073.6	6,091.4	6,075.2	14.4	12.6	-142.11	-259.7	282.8	255.7	231.5	24.26	10.541		
6,200.0	6,173.2	6,190.9	6,174.7	14.6	12.7	-143.53	-260.1	282.1	262.8	238.3	24.48	10.736		
6,300.0	6,272.7	6,290.4	6,274.3	14.9	12.8	-144.87	-260.6	281.3	270.0	245.3	24.70	10.933		
6,400.0	6,372.3	6,390.0	6,373.8	15.1	13.0	-146.14	-261.0	280.6	277.3	252.4	24.92	11.129		
6,500.0	6,471.8	6,489.5	6,473.4	15.4	13.1	-147.35	-261.4	279.8	284.8	259.7	25.15	11.324		
6,600.0	6,571.3	6,589.1	6,572.9	15.6	13.3	-148.49	-261.8	279.1	292.4	267.0	25.39	11.518		
6,700.0	6,670.9	6,688.6	6,672.4	15.8	13.4	-149.57	-262.3	278.4	300.1	274.5	25.63	11.711		
6,800.0	6,770.4	6,788.2	6,772.0	16.1	13.6	-150.60	-262.7	277.6	307.9	282.1	25.87	11.901		
6,900.0	6,870.0	6,887.7	6,871.5	16.3	13.7	-151.58	-263.1	276.9	315.8	289.7	26.13	12.089		
7,000.0	6,969.5	6,987.3	6,971.1	16.6	13.9	-152.52	-263.6	276.1	323.8	297.5	26.38	12.275		
7,100.0	7,069.1	7,086.9	7,070.7	16.8	14.0	-153.39	-264.0	275.4	331.3	304.6	26.65	12.432		
7,200.0	7,168.9	7,186.7	7,170.5	17.0	14.2	-153.98	-264.4	274.6	335.8	308.9	26.92	12.476		
7,300.0	7,268.9	7,286.7	7,270.5	17.1	14.3	-154.27	-264.9	273.9	337.2	310.0	27.19	12.402		
7,400.0	7,368.9	7,386.7	7,370.5	17.2	14.5	122.21	-265.3	273.1	336.9	309.4	27.50	12.250		
7,500.0	7,468.9	7,486.7	7,470.5	17.4	14.6	122.17	-265.7	272.4	336.7	308.9	27.82	12.105		
7,508.4	7,477.3	7,495.0	7,478.8	17.4	14.7	122.17	-265.8	272.3	336.7	308.9	27.84	12.094		
7,600.0	7,568.9	7,586.7	7,570.5	17.5	14.8	122.20	-266.2	271.6	336.8	308.7	28.14	11.971		
7,700.0	7,668.9	7,686.7	7,670.5	17.6	15.0	122.28	-266.6	270.9	337.1	308.7	28.46	11.845		
7,800.0	7,768.9	7,786.7	7,770.4	17.8	15.1	122.38	-267.0	270.2	337.5	308.7	28.79	11.724		
7,900.0	7,868.9	7,886.7	7,870.4	17.9	15.3	122.48	-267.5	269.4	337.9	308.8	29.11	11.605		
8,000.0	7,968.9	7,986.7	7,970.4	18.0	15.4	122.58	-267.9	268.7	338.2	308.8	29.44	11.489		
8,100.0	8,068.8	8,086.7	8,070.4	18.2	15.6	122.68	-268.3	267.9	338.6	308.9	29.77	11.375		
8,200.0	8,168.8	8,186.7	8,170.4	18.3	15.7	122.78	-268.7	267.2	339.0	308.9	30.10	11.264		
8,300.0	8,268.8	8,286.7	8,270.4	18.5	15.9	122.88	-269.2	266.4	339.4	308.9	30.42	11.155		
8,400.0	8,368.8	8,386.7	8,370.4	18.6	16.0	122.97	-269.6	265.7	339.7	309.0	30.75	11.048		
8,500.0	8,468.8	8,486.7	8,470.4	18.7	16.2	123.07	-270.0	264.9	340.1	309.0	31.08	10.943		
8,600.0	8,568.8	8,586.7	8,570.4	18.9	16.4	123.17	-270.5	264.2	340.5	309.1	31.41	10.840		
8,700.0	8,668.8	8,686.7	8,670.4	19.0	16.5	123.27	-270.9	263.4	340.9	309.1	31.74	10.739		
8,800.0	8,768.8	8,786.7	8,770.4	19.2	16.7	123.36	-271.3	262.7	341.3	309.2	32.07	10.641		
8,900.0	8,868.8	8,886.6	8,870.4	19.3	16.8	123.46	-271.8	261.9	341.6	309.2	32.40	10.544		
9,000.0	8,968.7	8,986.6	8,970.4	19.4	17.0	123.56	-272.2	261.2	342.0	309.3	32.73	10.449		
9,100.0	9,068.7	9,086.6	9,070.4	19.6	17.2	123.66	-272.6	260.4	342.4	309.3	33.06	10.356		
9,200.0	9,168.7	9,186.6	9,170.4	19.7	17.3	123.75	-273.1	259.7	342.8	309.4	33.40	10.264		
9,300.0	9,268.7	9,286.6	9,270.4	19.9	17.5	123.85	-273.5	258.9	343.2	309.4	33.73	10.175		
9,400.0	9,368.7	9,386.6	9,370.4	20.0	17.6	123.94	-273.9	258.2	343.5	309.5	34.06	10.087		
9,500.0	9,468.7	9,486.6	9,470.3	20.2	17.8	124.04	-274.4	257.4	343.9	309.5	34.39	10.000		
9,600.0	9,568.7	9,586.6	9,570.3	20.3	18.0	124.14	-274.8	256.7	344.3	309.6	34.73	9.915		
9,700.0	9,668.7	9,686.6	9,670.3	20.5	18.1	124.23	-275.2	256.0	344.7	309.6	35.06	9.832		
9,800.0	9,768.6	9,786.6	9,770.3	20.6	18.3	124.33	-275.7	255.2	345.1	309.7	35.39	9.750		
9,900.0	9,868.6	9,886.6	9,870.3	20.8	18.4	124.42	-276.1	254.5	345.5	309.8	35.73	9.670		
10,000.0	9,968.6	9,986.6	9,970.3	20.9	18.6	124.52	-276.5	253.7	345.9	309.8	36.06	9.591		
10,061.3	10,030.0	10,048.0	10,031.6	21.0	18.7	124.57	-276.8	253.3	346.1	309.9	36.27	9.544		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
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		
300.0	300.0	299.6	299.6	0.5	0.5	61.11	-13.7	-8.7	15.3	14.4	0.97	15.737 ES		
400.0	399.8	399.3	399.1	0.7	0.7	63.49	-18.8	-7.7	16.3	14.9	1.35	12.040		
500.0	499.5	498.9	498.4	0.9	0.9	66.57	-27.3	-6.1	18.0	16.2	1.78	10.113		
600.0	599.0	598.4	597.1	1.1	1.2	63.85	-39.2	-3.9	21.3	19.1	2.22	9.608 SF		
700.0	698.5	698.2	695.9	1.4	1.5	58.29	-53.2	-1.3	26.2	23.6	2.65	9.901		
800.0	798.1	798.1	794.7	1.6	1.7	54.46	-67.3	1.4	31.3	28.2	3.07	10.201		
900.0	897.6	897.9	893.6	1.8	2.0	51.71	-81.3	4.0	36.4	33.0	3.48	10.473		
1,000.0	997.2	997.8	992.4	2.1	2.3	49.64	-95.3	6.6	41.7	37.8	3.89	10.713		
1,100.0	1,096.7	1,097.6	1,091.2	2.3	2.6	48.04	-109.4	9.3	46.9	42.6	4.30	10.923		
1,200.0	1,196.2	1,197.5	1,190.0	2.6	2.9	46.76	-123.4	11.9	52.2	47.5	4.70	11.107		
1,300.0	1,295.8	1,297.3	1,288.9	2.8	3.2	45.72	-137.5	14.6	57.6	52.5	5.11	11.268		
1,400.0	1,395.3	1,397.2	1,387.7	3.0	3.5	44.85	-151.5	17.2	62.9	57.4	5.51	11.411		
1,500.0	1,494.9	1,497.1	1,486.5	3.3	3.8	44.12	-165.6	19.8	68.2	62.3	5.92	11.537		
1,600.0	1,594.4	1,596.9	1,585.3	3.5	4.1	43.49	-179.6	22.5	73.6	67.3	6.32	11.650		
1,700.0	1,693.9	1,696.8	1,684.2	3.8	4.4	42.95	-193.6	25.1	79.0	72.2	6.72	11.751		
1,800.0	1,793.5	1,796.6	1,783.0	4.0	4.7	42.48	-207.7	27.8	84.3	77.2	7.12	11.842		
1,900.0	1,893.0	1,896.5	1,881.8	4.2	5.1	42.07	-221.7	30.4	89.7	82.2	7.52	11.924		
2,000.0	1,992.5	1,996.3	1,980.7	4.5	5.4	41.70	-235.8	33.0	95.1	87.2	7.93	11.999		
2,100.0	2,092.1	2,096.2	2,079.5	4.7	5.7	41.37	-249.8	35.7	100.5	92.2	8.33	12.068		
2,200.0	2,191.6	2,196.0	2,178.3	5.0	6.0	41.07	-263.8	38.3	105.9	97.1	8.73	12.130		
2,300.0	2,291.2	2,295.9	2,277.1	5.2	6.3	40.81	-277.9	40.9	111.3	102.1	9.13	12.188		
2,400.0	2,390.7	2,395.7	2,376.0	5.5	6.6	40.57	-291.9	43.6	116.6	107.1	9.53	12.241		
2,500.0	2,490.2	2,495.6	2,474.8	5.7	6.9	40.35	-306.0	46.2	122.0	112.1	9.93	12.290		
2,600.0	2,589.8	2,595.4	2,573.6	5.9	7.2	40.14	-320.0	48.9	127.4	117.1	10.33	12.336		
2,700.0	2,689.3	2,695.3	2,672.4	6.2	7.5	39.96	-334.1	51.5	132.8	122.1	10.73	12.378		
2,800.0	2,788.9	2,795.1	2,771.3	6.4	7.8	39.79	-348.1	54.1	138.2	127.1	11.13	12.418		
2,900.0	2,888.4	2,895.0	2,870.1	6.7	8.1	39.63	-362.1	56.8	143.6	132.1	11.53	12.455		
3,000.0	2,987.9	2,994.9	2,968.9	6.9	8.4	39.48	-376.2	59.4	149.0	137.1	11.93	12.489		
3,100.0	3,087.5	3,094.7	3,067.7	7.1	8.7	39.35	-390.2	62.1	154.4	142.1	12.33	12.522		
3,200.0	3,187.0	3,194.6	3,166.6	7.4	9.0	39.22	-404.3	64.7	159.8	147.1	12.73	12.552		
3,300.0	3,286.6	3,294.4	3,265.4	7.6	9.3	39.10	-418.3	67.3	165.2	152.1	13.13	12.581		
3,400.0	3,386.1	3,394.3	3,364.2	7.9	9.6	38.99	-432.4	70.0	170.6	157.1	13.53	12.608		
3,500.0	3,485.6	3,494.1	3,463.0	8.1	9.9	38.88	-446.4	72.6	176.0	162.1	13.93	12.634		
3,600.0	3,585.2	3,594.0	3,561.9	8.4	10.2	38.79	-460.4	75.3	181.4	167.1	14.33	12.658		
3,700.0	3,684.7	3,693.8	3,660.7	8.6	10.5	38.69	-474.5	77.9	186.9	172.1	14.73	12.681		
3,800.0	3,784.3	3,793.7	3,759.5	8.8	10.8	38.61	-488.5	80.5	192.3	177.1	15.13	12.703		
3,900.0	3,883.8	3,893.5	3,858.3	9.1	11.1	38.52	-502.6	83.2	197.7	182.1	15.53	12.724		
4,000.0	3,983.3	3,993.4	3,957.2	9.3	11.4	38.45	-516.6	85.8	203.1	187.1	15.93	12.744		
4,100.0	4,082.9	4,093.2	4,056.0	9.6	11.7	38.37	-530.7	88.5	208.5	192.1	16.33	12.763		
4,200.0	4,182.4	4,193.1	4,154.8	9.8	12.0	38.30	-544.7	91.1	213.9	197.1	16.73	12.781		
4,300.0	4,281.9	4,292.9	4,253.6	10.0	12.3	38.23	-558.7	93.7	219.3	202.2	17.13	12.798		
4,400.0	4,381.5	4,392.8	4,352.5	10.3	12.6	38.17	-572.8	96.4	224.7	207.2	17.53	12.814		
4,500.0	4,481.0	4,492.7	4,451.3	10.5	12.9	38.11	-586.8	99.0	230.1	212.2	17.93	12.830		
4,600.0	4,580.6	4,592.5	4,550.1	10.8	13.3	38.05	-600.9	101.7	235.5	217.2	18.33	12.845		
4,700.0	4,680.1	4,692.4	4,648.9	11.0	13.6	38.00	-614.9	104.3	240.9	222.2	18.73	12.860		
4,800.0	4,779.6	4,792.2	4,747.8	11.3	13.9	37.94	-629.0	106.9	246.3	227.2	19.13	12.873		
4,900.0	4,879.2	4,892.1	4,846.6	11.5	14.2	37.89	-643.0	109.6	251.7	232.2	19.53	12.887		
5,000.0	4,978.7	4,991.9	4,945.4	11.7	14.5	37.84	-657.0	112.2	257.1	237.2	19.93	12.899		
5,100.0	5,078.3	5,091.8	5,044.3	12.0	14.8	37.80	-671.1	114.8	262.6	242.2	20.33	12.912		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,200.0	5,177.8	5,191.6	5,143.1	12.2	15.1	37.75	-685.1	117.5	268.0	247.2	20.73	12.924		
5,300.0	5,277.3	5,291.5	5,241.9	12.5	15.4	37.71	-699.2	120.1	273.4	252.2	21.13	12.935		
5,400.0	5,376.9	5,391.3	5,340.7	12.7	15.7	37.67	-713.2	122.8	278.8	257.2	21.53	12.946		
5,500.0	5,476.4	5,491.2	5,439.6	12.9	16.0	37.63	-727.3	125.4	284.2	262.3	21.93	12.957		
5,600.0	5,576.0	5,591.0	5,538.4	13.2	16.3	37.59	-741.3	128.0	289.6	267.3	22.33	12.967		
5,700.0	5,675.5	5,690.9	5,637.2	13.4	16.6	37.56	-755.3	130.7	295.0	272.3	22.73	12.977		
5,800.0	5,775.0	5,790.7	5,736.0	13.7	16.9	37.52	-769.4	133.3	300.4	277.3	23.13	12.986		
5,900.0	5,874.6	5,890.6	5,834.9	13.9	17.2	37.49	-783.4	136.0	305.8	282.3	23.53	12.995		
6,000.0	5,974.1	5,990.5	5,933.7	14.2	17.5	37.45	-797.5	138.6	311.2	287.3	23.93	13.004		
6,100.0	6,073.6	6,090.3	6,032.5	14.4	17.8	37.42	-811.5	141.2	316.7	292.3	24.33	13.013		
6,200.0	6,173.2	6,190.2	6,131.3	14.6	18.1	37.39	-825.6	143.9	322.1	297.3	24.73	13.021		
6,300.0	6,272.7	6,290.0	6,230.2	14.9	18.4	37.36	-839.6	146.5	327.5	302.3	25.13	13.029		
6,400.0	6,372.3	6,389.9	6,329.0	15.1	18.7	37.33	-853.6	149.2	332.9	307.3	25.53	13.037		
6,500.0	6,471.8	6,489.7	6,427.8	15.4	19.0	37.30	-867.7	151.8	338.3	312.4	25.93	13.045		
6,600.0	6,571.3	6,589.6	6,526.6	15.6	19.3	37.28	-881.7	154.4	343.7	317.4	26.33	13.052		
6,700.0	6,670.9	6,689.4	6,625.5	15.8	19.6	37.25	-895.8	157.1	349.1	322.4	26.73	13.059		
6,800.0	6,770.4	6,789.3	6,724.3	16.1	19.9	37.22	-909.8	159.7	354.5	327.4	27.13	13.066		
6,900.0	6,870.0	6,889.1	6,823.1	16.3	20.2	37.20	-923.8	162.4	359.9	332.4	27.53	13.073		
7,000.0	6,969.5	6,998.0	6,931.0	16.6	20.6	37.24	-938.1	165.0	364.5	336.5	27.96	13.038		
7,100.0	7,069.1	7,111.0	7,043.5	16.8	20.8	37.49	-948.9	167.1	366.3	337.9	28.39	12.898		
7,200.0	7,168.9	7,224.2	7,156.5	17.0	21.0	37.68	-955.2	168.3	367.0	338.3	28.77	12.757		
7,300.0	7,268.9	7,336.6	7,268.9	17.1	21.1	37.77	-957.2	168.6	367.0	337.9	29.08	12.618		
7,334.5	7,303.4	7,370.7	7,302.9	17.1	21.1	9.17	-957.2	168.6	366.9	337.7	29.19	12.570		
7,400.0	7,368.9	7,435.5	7,367.8	17.2	21.2	-45.65	-957.3	168.4	367.0	337.6	29.39	12.490		
7,500.0	7,468.9	7,534.4	7,466.6	17.4	21.3	-45.64	-957.7	167.9	367.0	337.4	29.69	12.365		
7,600.0	7,568.9	7,633.3	7,565.5	17.5	21.4	-45.63	-958.2	166.9	367.1	337.1	29.98	12.244		
7,700.0	7,668.9	7,732.7	7,664.9	17.6	21.5	-45.63	-959.0	165.6	367.1	336.8	30.28	12.126		
7,800.0	7,768.9	7,832.7	7,764.9	17.8	21.7	-45.63	-959.7	164.3	367.1	336.5	30.57	12.010		
7,900.0	7,868.9	7,932.7	7,864.9	17.9	21.8	-45.63	-960.5	162.9	367.1	336.3	30.86	11.896		
8,000.0	7,968.9	8,032.7	7,964.9	18.0	21.9	-45.63	-961.3	161.6	367.1	336.0	31.16	11.783		
8,100.0	8,068.8	8,132.7	8,064.8	18.2	22.0	-45.63	-962.1	160.2	367.1	335.7	31.45	11.673		
8,200.0	8,168.8	8,232.7	8,164.8	18.3	22.1	-45.63	-962.9	158.9	367.1	335.4	31.75	11.563		
8,300.0	8,268.8	8,332.7	8,264.8	18.5	22.3	-45.63	-963.6	157.5	367.1	335.1	32.05	11.456		
8,400.0	8,368.8	8,432.7	8,364.8	18.6	22.4	-45.63	-964.4	156.2	367.1	334.8	32.35	11.350		
8,500.0	8,468.8	8,532.7	8,464.8	18.7	22.5	-45.63	-965.2	154.8	367.1	334.5	32.65	11.246		
8,600.0	8,568.8	8,632.7	8,564.8	18.9	22.6	-45.63	-966.0	153.5	367.1	334.2	32.95	11.143		
8,700.0	8,668.8	8,732.7	8,664.8	19.0	22.7	-45.63	-966.7	152.1	367.1	333.9	33.25	11.042		
8,800.0	8,768.8	8,832.7	8,764.8	19.2	22.9	-45.63	-967.5	150.8	367.2	333.6	33.55	10.942		
8,900.0	8,868.8	8,932.7	8,864.7	19.3	23.0	-45.63	-968.3	149.4	367.2	333.3	33.86	10.844		
9,000.0	8,968.7	9,032.7	8,964.7	19.4	23.1	-45.63	-969.1	148.1	367.2	333.0	34.16	10.747		
9,100.0	9,068.7	9,132.7	9,064.7	19.6	23.2	-45.63	-969.9	146.7	367.2	332.7	34.47	10.652		
9,200.0	9,168.7	9,232.7	9,164.7	19.7	23.4	-45.63	-970.6	145.4	367.2	332.4	34.78	10.558		
9,300.0	9,268.7	9,332.7	9,264.7	19.9	23.5	-45.63	-971.4	144.0	367.2	332.1	35.08	10.466		
9,400.0	9,368.7	9,432.7	9,364.7	20.0	23.6	-45.63	-972.2	142.7	367.2	331.8	35.39	10.375		
9,500.0	9,468.7	9,532.7	9,464.7	20.2	23.8	-45.63	-973.0	141.3	367.2	331.5	35.70	10.285		
9,600.0	9,568.7	9,632.7	9,564.7	20.3	23.9	-45.63	-973.8	140.0	367.2	331.2	36.01	10.196		
9,700.0	9,668.7	9,732.7	9,664.6	20.5	24.0	-45.63	-974.5	138.6	367.2	330.9	36.32	10.109		
9,800.0	9,768.6	9,832.7	9,764.6	20.6	24.1	-45.63	-975.3	137.3	367.2	330.6	36.63	10.023		
9,900.0	9,868.6	9,932.7	9,864.6	20.8	24.3	-45.63	-976.1	136.0	367.2	330.2	36.95	9.939		
10,000.0	9,968.6	10,032.7	9,964.6	20.9	24.4	-45.63	-976.9	134.6	367.2	329.9	37.26	9.855		
10,030.3	9,999.0	10,063.0	9,995.0	20.9	24.4	-45.63	-977.1	134.2	367.2	329.8	37.35	9.830		
10,061.3	10,030.0	10,082.1	10,014.0	21.0	24.5	-45.63	-977.3	133.9	367.4	330.0	37.43	9.815		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	36.05	24.4	17.8	30.2						
100.0	100.0	100.0	100.0	0.1	0.1	36.05	24.4	17.8	30.2	29.9	0.27	110.863			
200.0	200.0	200.0	200.0	0.3	0.3	36.05	24.4	17.8	30.2	29.6	0.62	48.580 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	-123.34	24.4	17.8	31.1	30.1	0.97	31.975			
400.0	399.8	399.8	399.8	0.7	0.7	-130.62	24.4	17.8	34.3	32.9	1.33	25.708			
500.0	499.5	499.5	499.5	0.9	0.8	-139.85	24.4	17.8	40.4	38.7	1.70	23.833			
600.0	599.0	599.0	599.0	1.1	1.0	-147.22	24.4	17.8	48.2	46.1	2.05	23.472			
700.0	698.5	698.5	698.5	1.4	1.2	-152.49	24.4	17.8	56.5	54.1	2.40	23.501			
800.0	798.1	798.1	798.1	1.6	1.4	-156.39	24.4	17.8	65.1	62.4	2.75	23.673			
900.0	897.6	897.6	897.6	1.8	1.5	-159.36	24.4	17.8	74.0	70.9	3.10	23.891			
1,000.0	997.2	997.2	997.2	2.1	1.7	-161.69	24.4	17.8	83.1	79.6	3.44	24.114			
1,100.0	1,096.7	1,096.7	1,096.6	2.3	1.9	-162.55	24.6	19.4	92.2	88.4	3.80	24.296			
1,200.0	1,196.2	1,196.1	1,195.9	2.6	2.1	-161.29	25.2	24.4	101.5	97.4	4.17	24.373			
1,300.0	1,295.8	1,295.3	1,294.7	2.8	2.3	-158.47	26.3	32.8	111.1	106.5	4.56	24.361			
1,400.0	1,395.3	1,394.5	1,393.5	3.0	2.5	-155.25	27.6	43.1	121.1	116.2	4.98	24.347			
1,500.0	1,494.9	1,493.8	1,492.2	3.3	2.7	-152.53	28.8	53.3	131.5	126.1	5.40	24.351			
1,600.0	1,594.4	1,593.1	1,591.0	3.5	2.9	-150.22	30.1	63.5	142.1	136.3	5.83	24.370			
1,700.0	1,693.9	1,692.4	1,689.7	3.8	3.1	-148.22	31.4	73.7	153.0	146.7	6.27	24.399			
1,800.0	1,793.5	1,791.7	1,788.5	4.0	3.3	-146.49	32.6	83.9	163.9	157.2	6.71	24.437			
1,900.0	1,893.0	1,890.9	1,887.2	4.2	3.6	-144.98	33.9	94.1	175.0	167.9	7.15	24.480			
2,000.0	1,992.5	1,990.2	1,986.0	4.5	3.8	-143.65	35.2	104.3	186.3	178.7	7.59	24.527			
2,100.0	2,092.1	2,089.5	2,084.7	4.7	4.0	-142.47	36.4	114.5	197.6	189.5	8.04	24.577			
2,200.0	2,191.6	2,188.8	2,183.5	5.0	4.3	-141.42	37.7	124.7	208.9	200.4	8.48	24.628			
2,300.0	2,291.2	2,288.1	2,282.2	5.2	4.5	-140.48	39.0	134.9	220.4	211.4	8.93	24.680			
2,400.0	2,390.7	2,387.4	2,381.0	5.5	4.7	-139.63	40.3	145.1	231.9	222.5	9.38	24.731			
2,500.0	2,490.2	2,486.6	2,479.7	5.7	5.0	-138.86	41.5	155.3	243.4	233.6	9.82	24.782			
2,600.0	2,589.8	2,585.9	2,578.5	5.9	5.2	-138.16	42.8	165.5	255.0	244.7	10.27	24.832			
2,700.0	2,689.3	2,685.2	2,677.2	6.2	5.5	-137.53	44.1	175.7	266.6	255.9	10.71	24.881			
2,800.0	2,788.9	2,784.5	2,776.0	6.4	5.7	-136.94	45.3	185.9	278.2	267.1	11.16	24.929			
2,900.0	2,888.4	2,883.8	2,874.7	6.7	6.0	-136.40	46.6	196.1	289.9	278.3	11.61	24.975			
3,000.0	2,987.9	2,983.0	2,973.4	6.9	6.2	-135.91	47.9	206.3	301.6	289.5	12.05	25.020			
3,100.0	3,087.5	3,082.3	3,072.2	7.1	6.4	-135.45	49.2	216.5	313.3	300.8	12.50	25.063			
3,200.0	3,187.0	3,182.6	3,172.0	7.4	6.7	-135.02	50.4	226.8	325.0	312.0	12.95	25.102			
3,300.0	3,286.6	3,287.9	3,276.9	7.6	6.9	-135.00	51.5	235.0	335.5	322.2	13.37	25.104			
3,400.0	3,386.1	3,393.4	3,382.3	7.9	7.1	-135.54	52.0	239.4	344.4	330.6	13.75	25.052			
3,500.0	3,485.6	3,497.2	3,486.1	8.1	7.2	-136.57	52.1	240.2	351.6	337.5	14.09	24.949			
3,600.0	3,585.2	3,597.9	3,586.8	8.4	7.4	-137.67	51.9	239.9	358.4	343.9	14.43	24.839			
3,700.0	3,684.7	3,697.5	3,686.4	8.6	7.5	-138.75	51.6	239.3	365.1	350.3	14.76	24.737			
3,800.0	3,784.3	3,797.0	3,785.9	8.8	7.7	-139.78	51.3	238.8	371.9	356.8	15.09	24.651			
3,900.0	3,883.8	3,896.6	3,885.5	9.1	7.8	-140.78	51.0	238.3	378.9	363.4	15.41	24.579			
4,000.0	3,983.3	3,996.1	3,985.0	9.3	8.0	-141.74	50.7	237.7	385.9	370.2	15.74	24.518			
4,100.0	4,082.9	4,095.7	4,084.5	9.6	8.1	-142.67	50.4	237.2	393.1	377.0	16.06	24.468			
4,200.0	4,182.4	4,195.2	4,184.1	9.8	8.3	-143.56	50.1	236.7	400.3	384.0	16.39	24.428			
4,300.0	4,281.9	4,294.7	4,283.6	10.0	8.4	-144.43	49.8	236.2	407.7	391.0	16.71	24.396			
4,400.0	4,381.5	4,394.3	4,383.2	10.3	8.6	-145.26	49.5	235.6	415.1	398.1	17.03	24.371			
4,500.0	4,481.0	4,493.8	4,482.7	10.5	8.7	-146.06	49.2	235.1	422.7	405.3	17.36	24.352			
4,600.0	4,580.6	4,593.4	4,582.2	10.8	8.9	-146.83	48.8	234.6	430.3	412.6	17.68	24.339			
4,700.0	4,680.1	4,692.9	4,681.8	11.0	9.0	-147.58	48.5	234.0	438.0	420.0	18.00	24.331			
4,800.0	4,779.6	4,792.5	4,781.3	11.3	9.2	-148.30	48.2	233.5	445.7	427.4	18.32	24.328			
4,900.0	4,879.2	4,892.0	4,880.9	11.5	9.3	-149.00	47.9	233.0	453.6	434.9	18.64	24.328			
5,000.0	4,978.7	4,991.6	4,980.4	11.7	9.5	-149.67	47.6	232.5	461.4	442.5	18.96	24.332			
5,100.0	5,078.3	5,091.1	5,080.0	12.0	9.6	-150.32	47.3	231.9	469.4	450.1	19.29	24.339			

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,200.0	5,177.8	5,190.6	5,179.5	12.2	9.8	-150.95	47.0	231.4	477.4	457.8	19.61	24.348		
5,300.0	5,277.3	5,290.2	5,279.0	12.5	9.9	-151.56	46.7	230.9	485.5	465.5	19.93	24.359		
5,400.0	5,376.9	5,389.7	5,378.6	12.7	10.1	-152.14	46.4	230.3	493.6	473.3	20.25	24.373		
5,500.0	5,476.4	5,489.3	5,478.1	12.9	10.3	-152.71	46.1	229.8	501.8	481.2	20.57	24.388		
5,600.0	5,576.0	5,588.8	5,577.7	13.2	10.4	-153.26	45.8	229.3	510.0	489.1	20.90	24.405		
5,700.0	5,675.5	5,688.4	5,677.2	13.4	10.6	-153.80	45.5	228.8	518.2	497.0	21.22	24.423		
5,800.0	5,775.0	5,787.9	5,776.8	13.7	10.7	-154.31	45.2	228.2	526.5	505.0	21.54	24.442		
5,900.0	5,874.6	5,887.4	5,876.3	13.9	10.9	-154.81	44.9	227.7	534.9	513.0	21.87	24.462		
6,000.0	5,974.1	5,987.0	5,975.8	14.2	11.0	-155.30	44.6	227.2	543.3	521.1	22.19	24.483		
6,100.0	6,073.6	6,086.5	6,075.4	14.4	11.2	-155.77	44.3	226.6	551.7	529.2	22.51	24.504		
6,200.0	6,173.2	6,186.1	6,174.9	14.6	11.4	-156.22	44.0	226.1	560.1	537.3	22.84	24.526		
6,300.0	6,272.7	6,285.6	6,274.5	14.9	11.5	-156.67	43.6	225.6	568.6	545.5	23.16	24.549		
6,400.0	6,372.3	6,385.2	6,374.0	15.1	11.7	-157.10	43.3	225.1	577.1	553.7	23.49	24.572		
6,500.0	6,471.8	6,484.7	6,473.5	15.4	11.9	-157.51	43.0	224.5	585.7	561.9	23.81	24.595		
6,600.0	6,571.3	6,584.3	6,573.1	15.6	12.0	-157.92	42.7	224.0	594.3	570.1	24.14	24.618		
6,700.0	6,670.9	6,683.8	6,672.6	15.8	12.2	-158.31	42.4	223.5	602.9	578.4	24.47	24.642		
6,800.0	6,770.4	6,783.3	6,772.2	16.1	12.3	-158.69	42.1	222.9	611.5	586.8	24.79	24.665		
6,900.0	6,870.0	6,882.9	6,871.7	16.3	12.5	-159.07	41.8	222.4	620.2	595.1	25.12	24.689		
7,000.0	6,969.5	6,982.4	6,971.3	16.6	12.7	-159.43	41.5	221.9	628.9	603.5	25.45	24.713		
7,100.0	7,069.1	7,082.0	7,070.9	16.8	12.8	-159.79	41.2	221.4	636.9	611.1	25.79	24.699		
7,200.0	7,168.9	7,181.9	7,170.7	17.0	13.0	-160.05	40.9	220.8	641.9	615.8	26.12	24.577		
7,300.0	7,268.9	7,281.9	7,270.7	17.1	13.2	-160.17	40.6	220.3	643.6	617.2	26.43	24.348		
7,400.0	7,368.9	7,381.9	7,370.7	17.2	13.3	116.37	40.3	219.8	643.4	616.7	26.76	24.043		
7,451.1	7,420.0	7,433.0	7,421.8	17.3	13.4	116.37	40.1	219.5	643.4	616.5	26.93	23.891		
7,500.0	7,468.9	7,481.9	7,470.7	17.4	13.5	116.37	40.0	219.2	643.4	616.3	27.09	23.750		
7,600.0	7,568.9	7,581.9	7,570.7	17.5	13.7	116.40	39.7	218.7	643.6	616.2	27.42	23.470		
7,700.0	7,668.9	7,681.8	7,670.7	17.6	13.8	116.47	39.4	218.2	644.0	616.2	27.75	23.203		
7,800.0	7,768.9	7,781.8	7,770.7	17.8	14.0	116.55	39.1	217.6	644.4	616.3	28.09	22.944		
7,900.0	7,868.9	7,881.8	7,870.7	17.9	14.2	116.62	38.8	217.1	644.8	616.4	28.42	22.691		
8,000.0	7,968.9	7,981.8	7,970.6	18.0	14.3	116.70	38.4	216.6	645.2	616.5	28.75	22.443		
8,100.0	8,068.8	8,081.8	8,070.6	18.2	14.5	116.77	38.1	216.1	645.7	616.6	29.08	22.201		
8,200.0	8,168.8	8,181.8	8,170.6	18.3	14.7	116.84	37.8	215.5	646.1	616.7	29.42	21.963		
8,300.0	8,268.8	8,281.8	8,270.6	18.5	14.8	116.92	37.5	215.0	646.5	616.8	29.75	21.731		
8,400.0	8,368.8	8,381.8	8,370.6	18.6	15.0	116.99	37.2	214.5	646.9	616.9	30.08	21.504		
8,500.0	8,468.8	8,481.8	8,470.6	18.7	15.2	117.07	36.9	213.9	647.4	617.0	30.42	21.282		
8,600.0	8,568.8	8,581.8	8,570.6	18.9	15.3	117.14	36.6	213.4	647.8	617.0	30.75	21.064		
8,700.0	8,668.8	8,681.8	8,670.6	19.0	15.5	117.22	36.3	212.9	648.2	617.1	31.09	20.851		
8,800.0	8,768.8	8,781.8	8,770.6	19.2	15.7	117.29	36.0	212.3	648.7	617.2	31.42	20.642		
8,900.0	8,868.8	8,881.8	8,870.6	19.3	15.8	117.36	35.7	211.8	649.1	617.3	31.76	20.437		
9,000.0	8,968.7	8,981.8	8,970.6	19.4	16.0	117.44	35.4	211.3	649.5	617.4	32.10	20.237		
9,100.0	9,068.7	9,081.8	9,070.6	19.6	16.2	117.51	35.1	210.7	650.0	617.5	32.43	20.040		
9,200.0	9,168.7	9,181.8	9,170.6	19.7	16.3	117.59	34.8	210.2	650.4	617.6	32.77	19.848		
9,300.0	9,268.7	9,281.8	9,270.6	19.9	16.5	117.66	34.5	209.7	650.8	617.7	33.11	19.659		
9,400.0	9,368.7	9,381.8	9,370.6	20.0	16.7	117.73	34.1	209.1	651.3	617.8	33.44	19.474		
9,500.0	9,468.7	9,481.8	9,470.5	20.2	16.9	117.81	33.8	208.6	651.7	617.9	33.78	19.292		
9,600.0	9,568.7	9,581.8	9,570.5	20.3	17.0	117.88	33.5	208.1	652.1	618.0	34.12	19.114		
9,700.0	9,668.7	9,681.8	9,670.5	20.5	17.2	117.95	33.2	207.6	652.6	618.1	34.46	18.940		
9,800.0	9,768.6	9,781.8	9,770.5	20.6	17.4	118.03	32.9	207.0	653.0	618.2	34.79	18.768		
9,900.0	9,868.6	9,881.8	9,870.5	20.8	17.5	118.10	32.6	206.5	653.5	618.3	35.13	18.600		
10,000.0	9,968.6	9,981.7	9,970.5	20.9	17.7	118.17	32.3	206.0	653.9	618.4	35.47	18.435		
10,061.3	10,030.0	10,043.1	10,031.9	21.0	17.8	118.22	32.1	205.6	654.2	618.5	35.68	18.335 SF		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	36.66	47.3	35.2	59.0					
100.0	100.0	100.0	100.0	0.1	0.1	36.66	47.3	35.2	59.0	58.8	0.27	216.789		
200.0	200.0	200.0	200.0	0.3	0.3	36.66	47.3	35.2	59.0	58.4	0.62	94.997 CC, ES		
300.0	300.0	297.9	297.9	0.5	0.5	-121.01	48.5	36.5	61.6	60.6	0.97	63.510		
400.0	399.8	395.4	395.3	0.7	0.7	-123.63	51.8	40.2	69.4	68.0	1.33	52.156		
500.0	499.5	494.4	494.0	0.9	0.9	-127.26	56.6	45.4	81.2	79.5	1.71	47.542		
600.0	599.0	593.4	592.8	1.1	1.1	-130.52	61.3	50.6	93.9	91.8	2.09	44.938		
700.0	698.5	692.5	691.6	1.4	1.3	-133.00	66.1	55.9	106.8	104.4	2.47	43.211		
800.0	798.1	791.6	790.4	1.6	1.5	-134.95	70.8	61.1	119.9	117.1	2.86	41.995		
900.0	897.6	890.6	889.2	1.8	1.7	-136.51	75.5	66.3	133.2	129.9	3.24	41.099		
1,000.0	997.2	989.7	988.0	2.1	1.9	-137.79	80.3	71.6	146.5	142.8	3.62	40.414		
1,100.0	1,096.7	1,088.8	1,086.9	2.3	2.1	-138.85	85.0	76.8	159.8	155.8	4.01	39.876		
1,200.0	1,196.2	1,187.8	1,185.7	2.6	2.3	-139.75	89.8	82.0	173.2	168.8	4.39	39.442		
1,300.0	1,295.8	1,286.9	1,284.5	2.8	2.6	-140.52	94.5	87.2	186.6	181.9	4.78	39.086		
1,400.0	1,395.3	1,386.0	1,383.3	3.0	2.8	-141.19	99.3	92.5	200.1	194.9	5.16	38.788		
1,500.0	1,494.9	1,485.0	1,482.1	3.3	3.0	-141.77	104.0	97.7	213.6	208.0	5.54	38.536		
1,600.0	1,594.4	1,584.1	1,580.9	3.5	3.2	-142.29	108.8	102.9	227.1	221.2	5.93	38.320		
1,700.0	1,693.9	1,683.2	1,679.7	3.8	3.4	-142.74	113.5	108.2	240.6	234.3	6.31	38.133		
1,800.0	1,793.5	1,782.2	1,778.5	4.0	3.6	-143.15	118.3	113.4	254.1	247.4	6.69	37.970		
1,900.0	1,893.0	1,881.3	1,877.4	4.2	3.8	-143.52	123.0	118.6	267.7	260.6	7.08	37.826		
2,000.0	1,992.5	1,980.4	1,976.2	4.5	4.0	-143.85	127.8	123.9	281.2	273.8	7.46	37.698		
2,100.0	2,092.1	2,079.4	2,075.0	4.7	4.3	-144.15	132.5	129.1	294.8	287.0	7.84	37.583		
2,200.0	2,191.6	2,178.5	2,173.8	5.0	4.5	-144.42	137.3	134.3	308.4	300.1	8.23	37.481		
2,300.0	2,291.2	2,277.5	2,272.6	5.2	4.7	-144.68	142.0	139.6	322.0	313.3	8.61	37.388		
2,400.0	2,390.7	2,376.6	2,371.4	5.5	4.9	-144.91	146.7	144.8	335.5	326.5	8.99	37.304		
2,500.0	2,490.2	2,475.7	2,470.2	5.7	5.1	-145.12	151.5	150.0	349.1	339.7	9.38	37.227		
2,600.0	2,589.8	2,574.7	2,569.0	5.9	5.3	-145.32	156.2	155.3	362.7	353.0	9.76	37.156		
2,700.0	2,689.3	2,673.8	2,667.9	6.2	5.5	-145.50	161.0	160.5	376.3	366.2	10.15	37.092		
2,800.0	2,788.9	2,772.9	2,766.7	6.4	5.7	-145.67	165.7	165.7	389.9	379.4	10.53	37.032		
2,900.0	2,888.4	2,871.9	2,865.5	6.7	6.0	-145.83	170.5	171.0	403.5	392.6	10.91	36.977		
3,000.0	2,987.9	2,971.0	2,964.3	6.9	6.2	-145.98	175.2	176.2	417.1	405.8	11.30	36.926		
3,100.0	3,087.5	3,070.1	3,063.1	7.1	6.4	-146.11	180.0	181.4	430.7	419.0	11.68	36.879		
3,200.0	3,187.0	3,169.1	3,161.9	7.4	6.6	-146.24	184.7	186.6	444.3	432.3	12.06	36.835		
3,300.0	3,286.6	3,268.2	3,260.7	7.6	6.8	-146.37	189.5	191.9	457.9	445.5	12.45	36.793		
3,400.0	3,386.1	3,367.3	3,359.5	7.9	7.0	-146.48	194.2	197.1	471.6	458.7	12.83	36.755		
3,500.0	3,485.6	3,466.3	3,458.4	8.1	7.2	-146.59	199.0	202.3	485.2	472.0	13.21	36.718		
3,600.0	3,585.2	3,565.4	3,557.2	8.4	7.4	-146.69	203.7	207.6	498.8	485.2	13.60	36.684		
3,700.0	3,684.7	3,664.5	3,656.0	8.6	7.6	-146.79	208.5	212.8	512.4	498.4	13.98	36.652		
3,800.0	3,784.3	3,763.5	3,754.8	8.8	7.9	-146.88	213.2	218.0	526.0	511.7	14.36	36.622		
3,900.0	3,883.8	3,862.6	3,853.6	9.1	8.1	-146.97	218.0	223.3	539.7	524.9	14.75	36.593		
4,000.0	3,983.3	3,961.6	3,952.4	9.3	8.3	-147.06	222.7	228.5	553.3	538.2	15.13	36.566		
4,100.0	4,082.9	4,060.7	4,051.2	9.6	8.5	-147.14	227.4	233.7	566.9	551.4	15.51	36.540		
4,200.0	4,182.4	4,159.8	4,150.0	9.8	8.7	-147.21	232.2	239.0	580.5	564.6	15.90	36.516		
4,300.0	4,281.9	4,258.8	4,248.9	10.0	8.9	-147.28	236.9	244.2	594.2	577.9	16.28	36.492		
4,400.0	4,381.5	4,357.9	4,347.7	10.3	9.1	-147.35	241.7	249.4	607.8	591.1	16.67	36.470		
4,500.0	4,481.0	4,457.0	4,446.5	10.5	9.3	-147.42	246.4	254.7	621.4	604.4	17.05	36.449		
4,600.0	4,580.6	4,556.0	4,545.3	10.8	9.6	-147.48	251.2	259.9	635.0	617.6	17.43	36.429		
4,700.0	4,680.1	4,655.1	4,644.1	11.0	9.8	-147.54	255.9	265.1	648.7	630.9	17.82	36.410		
4,800.0	4,779.6	4,754.2	4,742.9	11.3	10.0	-147.60	260.7	270.4	662.3	644.1	18.20	36.392		
4,900.0	4,879.2	4,853.2	4,841.7	11.5	10.2	-147.66	265.4	275.6	675.9	657.3	18.58	36.374		
5,000.0	4,978.7	4,952.3	4,940.5	11.7	10.4	-147.71	270.2	280.8	689.6	670.6	18.97	36.357		
5,100.0	5,078.3	5,051.4	5,039.4	12.0	10.6	-147.76	274.9	286.0	703.2	683.8	19.35	36.341		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
5,200.0	5,177.8	5,150.4	5,138.2	12.2	10.8	-147.81	279.7	291.3	716.8	697.1	19.73	36.326		
5,300.0	5,277.3	5,249.5	5,237.0	12.5	11.0	-147.86	284.4	296.5	730.5	710.3	20.12	36.311		
5,400.0	5,376.9	5,348.5	5,335.8	12.7	11.3	-147.90	289.2	301.7	744.1	723.6	20.50	36.297		
5,500.0	5,476.4	5,447.6	5,434.6	12.9	11.5	-147.95	293.9	307.0	757.7	736.8	20.88	36.283		
5,600.0	5,576.0	5,546.7	5,533.4	13.2	11.7	-147.99	298.7	312.2	771.4	750.1	21.27	36.270		
5,700.0	5,675.5	5,645.7	5,632.2	13.4	11.9	-148.03	303.4	317.4	785.0	763.3	21.65	36.257		
5,800.0	5,775.0	5,744.8	5,731.0	13.7	12.1	-148.07	308.1	322.7	798.6	776.6	22.03	36.245		
5,900.0	5,874.6	5,853.5	5,839.4	13.9	12.3	-148.13	313.1	328.2	812.1	789.6	22.43	36.205		
6,000.0	5,974.1	5,980.9	5,966.8	14.2	12.5	-148.39	316.0	331.4	822.8	800.0	22.83	36.039		
6,100.0	6,073.6	6,089.4	6,075.3	14.4	12.7	-148.77	316.1	331.4	831.1	807.9	23.19	35.836		
6,200.0	6,173.2	6,191.2	6,177.1	14.6	12.8	-149.14	315.8	330.9	839.0	815.4	23.53	35.648		
6,300.0	6,272.7	6,292.0	6,277.9	14.9	13.0	-149.53	315.3	330.1	846.6	822.8	23.88	35.462		
6,400.0	6,372.3	6,391.5	6,377.4	15.1	13.1	-149.91	314.8	329.2	854.3	830.1	24.21	35.284		
6,500.0	6,471.8	6,491.1	6,477.0	15.4	13.2	-150.28	314.3	328.3	862.1	837.5	24.55	35.114		
6,600.0	6,571.3	6,590.6	6,576.5	15.6	13.4	-150.65	313.8	327.5	869.8	844.9	24.89	34.950		
6,700.0	6,670.9	6,690.2	6,676.0	15.8	13.5	-151.01	313.3	326.6	877.6	852.4	25.22	34.792		
6,800.0	6,770.4	6,789.7	6,775.6	16.1	13.7	-151.36	312.8	325.7	885.4	859.9	25.56	34.640		
6,900.0	6,870.0	6,889.3	6,875.1	16.3	13.8	-151.71	312.3	324.9	893.3	867.4	25.90	34.494		
7,000.0	6,969.5	6,988.8	6,974.7	16.6	14.0	-152.05	311.8	324.0	901.2	875.0	26.23	34.354		
7,100.0	7,069.1	7,088.4	7,074.3	16.8	14.1	-152.41	311.3	323.1	908.5	881.9	26.58	34.174		
7,200.0	7,168.9	7,188.3	7,174.1	17.0	14.2	-152.66	310.8	322.2	912.9	885.9	26.92	33.907		
7,300.0	7,268.9	7,288.2	7,274.1	17.1	14.4	-152.79	310.3	321.4	914.2	886.9	27.24	33.560		
7,400.0	7,368.9	7,388.2	7,374.1	17.2	14.5	123.75	309.8	320.5	913.7	886.2	27.56	33.158		
7,500.0	7,468.9	7,488.2	7,474.0	17.4	14.7	123.73	309.3	319.6	913.5	885.6	27.87	32.773		
7,542.1	7,511.0	7,530.3	7,516.2	17.4	14.7	123.72	309.1	319.3	913.5	885.5	28.01	32.617		
7,600.0	7,568.9	7,588.2	7,574.0	17.5	14.8	123.73	308.8	318.7	913.5	885.3	28.19	32.407		
7,700.0	7,668.9	7,688.2	7,674.0	17.6	15.0	123.75	308.3	317.9	913.8	885.3	28.50	32.057		
7,800.0	7,768.9	7,788.2	7,774.0	17.8	15.1	123.78	307.8	317.0	914.1	885.2	28.82	31.715		
7,900.0	7,868.9	7,888.2	7,874.0	17.9	15.3	123.81	307.3	316.1	914.4	885.2	29.14	31.380		
8,000.0	7,968.9	7,988.2	7,974.0	18.0	15.4	123.84	306.8	315.3	914.7	885.2	29.46	31.051		
8,100.0	8,068.8	8,088.2	8,074.0	18.2	15.6	123.87	306.3	314.4	915.0	885.2	29.78	30.729		
8,200.0	8,168.8	8,188.2	8,174.0	18.3	15.7	123.89	305.7	313.5	915.3	885.2	30.09	30.413		
8,300.0	8,268.8	8,288.2	8,274.0	18.5	15.9	123.92	305.2	312.6	915.6	885.2	30.41	30.103		
8,400.0	8,368.8	8,388.2	8,374.0	18.6	16.0	123.95	304.7	311.8	915.9	885.1	30.74	29.798		
8,500.0	8,468.8	8,488.2	8,474.0	18.7	16.2	123.98	304.2	310.9	916.2	885.1	31.06	29.499		
8,600.0	8,568.8	8,588.2	8,574.0	18.9	16.3	124.01	303.7	310.0	916.5	885.1	31.38	29.206		
8,700.0	8,668.8	8,688.2	8,674.0	19.0	16.5	124.04	303.2	309.1	916.8	885.1	31.70	28.918		
8,800.0	8,768.8	8,788.2	8,774.0	19.2	16.6	124.06	302.7	308.3	917.1	885.1	32.03	28.636		
8,900.0	8,868.8	8,888.2	8,874.0	19.3	16.8	124.09	302.2	307.4	917.4	885.0	32.35	28.359		
9,000.0	8,968.7	8,988.2	8,974.0	19.4	16.9	124.12	301.7	306.5	917.7	885.0	32.67	28.086		
9,100.0	9,068.7	9,088.2	9,073.9	19.6	17.1	124.15	301.2	305.6	918.0	885.0	33.00	27.819		
9,200.0	9,168.7	9,188.2	9,173.9	19.7	17.3	124.18	300.7	304.8	918.3	885.0	33.32	27.556		
9,300.0	9,268.7	9,288.2	9,273.9	19.9	17.4	124.20	300.2	303.9	918.6	885.0	33.65	27.298		
9,400.0	9,368.7	9,388.2	9,373.9	20.0	17.6	124.23	299.7	303.0	918.9	884.9	33.98	27.045		
9,500.0	9,468.7	9,488.2	9,473.9	20.2	17.7	124.26	299.2	302.1	919.2	884.9	34.30	26.796		
9,600.0	9,568.7	9,588.2	9,573.9	20.3	17.9	124.29	298.7	301.3	919.5	884.9	34.63	26.551		
9,700.0	9,668.7	9,688.2	9,673.9	20.5	18.0	124.32	298.2	300.4	919.8	884.9	34.96	26.311		
9,800.0	9,768.6	9,788.2	9,773.9	20.6	18.2	124.35	297.7	299.5	920.1	884.8	35.29	26.075		
9,900.0	9,868.6	9,888.2	9,873.9	20.8	18.4	124.37	297.2	298.6	920.4	884.8	35.62	25.842		
10,000.0	9,968.6	9,988.2	9,973.9	20.9	18.5	124.40	296.6	297.8	920.7	884.8	35.95	25.614		
10,061.3	10,030.0	10,049.5	10,035.2	21.0	18.6	124.42	296.3	297.2	920.9	884.8	36.15	25.476 SF		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Survey Program: 139-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	36.59	35.3	26.2	44.0					
100.0	100.0	99.6	99.6	0.1	0.1	36.54	35.7	26.5	44.5	44.2	0.28	157.372		
200.0	200.0	198.9	198.9	0.3	0.3	36.26	37.2	27.3	46.1	45.5	0.62	74.251		
300.0	300.0	297.8	297.7	0.5	0.5	-123.23	40.5	28.4	50.5	49.5	0.97	51.990		
400.0	399.8	395.3	395.0	0.7	0.7	-129.61	46.7	29.5	59.6	58.3	1.33	44.914		
500.0	499.5	491.4	490.6	0.9	0.9	-136.52	56.4	31.3	75.5	73.8	1.69	44.760 SF		
600.0	599.0	588.4	586.8	1.1	1.2	-142.27	68.5	32.5	95.2	93.1	2.04	46.580		
700.0	698.5	685.0	682.5	1.4	1.5	-147.07	81.9	31.9	116.4	114.0	2.39	48.636		
800.0	798.1	781.9	778.4	1.6	1.8	-150.48	95.9	31.1	138.6	135.9	2.74	50.626		
900.0	897.6	878.9	874.3	1.8	2.1	-152.30	109.7	32.1	161.3	158.2	3.09	52.234		
1,000.0	997.2	975.4	969.8	2.1	2.4	-153.56	123.8	33.5	184.3	180.9	3.44	53.625		
1,100.0	1,096.7	1,071.2	1,064.5	2.3	2.7	-154.42	138.2	35.2	207.9	204.1	3.79	54.902		
1,200.0	1,196.2	1,166.1	1,158.2	2.6	3.0	-155.11	153.4	37.0	232.5	228.3	4.14	56.209		
1,300.0	1,295.8	1,265.7	1,256.5	2.8	3.3	-155.67	169.1	38.9	256.9	252.4	4.49	57.167		
1,400.0	1,395.3	1,365.9	1,355.6	3.0	3.6	-156.21	183.8	40.5	280.1	275.3	4.85	57.742		
1,500.0	1,494.9	1,463.9	1,452.6	3.3	3.9	-156.64	197.5	42.1	302.8	297.6	5.21	58.157		
1,600.0	1,594.4	1,561.6	1,549.4	3.5	4.2	-156.94	211.1	44.1	325.4	319.9	5.56	58.496		
1,700.0	1,693.9	1,660.4	1,647.2	3.8	4.5	-157.28	224.7	45.6	347.8	341.9	5.92	58.757		
1,800.0	1,793.5	1,759.8	1,745.8	4.0	4.7	-157.66	237.7	46.7	369.7	363.4	6.28	58.897		
1,900.0	1,893.0	1,858.6	1,843.7	4.2	5.0	-157.96	250.4	48.0	391.3	384.6	6.63	58.975		
2,000.0	1,992.5	1,957.6	1,942.0	4.5	5.3	-158.18	262.7	49.7	412.5	405.5	6.99	58.974		
2,100.0	2,092.1	2,055.1	2,038.6	4.7	5.6	-158.27	274.7	52.2	433.5	426.1	7.35	58.955		
2,200.0	2,191.6	2,153.0	2,135.8	5.0	5.9	-158.34	287.0	54.7	454.7	447.0	7.71	58.961		
2,300.0	2,291.2	2,251.9	2,233.9	5.2	6.1	-158.46	299.1	56.9	475.6	467.6	8.07	58.927		
2,400.0	2,390.7	2,347.8	2,329.0	5.5	6.4	-158.59	310.7	58.7	496.6	488.1	8.43	58.928		
2,500.0	2,490.2	2,439.8	2,420.3	5.7	6.7	-158.64	322.7	61.0	518.3	509.5	8.78	59.060		
2,600.0	2,589.8	2,529.3	2,508.9	5.9	7.0	-158.73	335.5	62.8	541.3	532.2	9.12	59.359		
2,700.0	2,689.3	2,623.2	2,601.5	6.2	7.3	-158.80	350.2	64.8	565.6	556.1	9.47	59.724		
2,800.0	2,788.9	2,723.3	2,700.4	6.4	7.6	-158.87	365.4	67.0	589.5	579.7	9.83	59.963		
2,900.0	2,888.4	2,819.1	2,795.2	6.7	7.9	-159.00	379.9	68.3	613.4	603.2	10.18	60.236		
3,000.0	2,987.9	2,914.8	2,889.7	6.9	8.2	-159.18	394.7	69.0	637.6	627.0	10.53	60.532		
3,100.0	3,087.5	3,017.7	2,991.4	7.1	8.5	-159.39	410.3	69.4	661.6	650.7	10.89	60.734		
3,200.0	3,187.0	3,115.4	3,088.1	7.4	8.8	-159.59	424.2	69.6	684.6	673.4	11.25	60.871		
3,300.0	3,286.6	3,203.8	3,175.5	7.6	9.1	-159.66	437.6	71.1	708.4	696.8	11.59	61.120		
3,400.0	3,386.1	3,300.8	3,271.2	7.9	9.4	-159.58	453.4	74.3	733.3	721.3	11.95	61.352		
3,500.0	3,485.6	3,406.2	3,375.2	8.1	9.7	-159.57	469.4	77.2	757.2	744.9	12.32	61.447		
3,600.0	3,585.2	3,494.5	3,462.5	8.4	10.0	-159.65	482.6	78.3	780.9	768.2	12.66	61.665		
3,700.0	3,684.7	3,591.9	3,558.7	8.6	10.4	-159.67	498.4	80.4	805.8	792.8	13.02	61.882		
3,800.0	3,784.3	3,680.2	3,645.8	8.8	10.7	-159.67	512.5	82.5	830.4	817.1	13.37	62.129		
3,900.0	3,883.8	3,759.2	3,723.5	9.1	11.0	-159.63	526.6	84.9	856.9	843.2	13.70	62.566		
4,000.0	3,983.3	3,844.5	3,807.0	9.3	11.3	-159.52	543.6	88.5	885.2	871.2	14.04	63.055		
4,100.0	4,082.9	3,940.0	3,900.5	9.6	11.7	-159.45	562.7	91.7	913.8	899.4	14.40	63.475		
4,200.0	4,182.4	4,035.7	3,994.1	9.8	12.0	-159.46	582.2	93.7	942.8	928.0	14.75	63.919		
4,300.0	4,281.9	4,140.3	4,096.8	10.0	12.4	-159.48	602.4	95.7	970.6	955.5	15.12	64.200		
4,400.0	4,381.5	4,225.2	4,180.0	10.3	12.8	-159.53	619.0	96.9	998.9	983.5	15.45	64.647		
4,500.0	4,481.0	4,314.5	4,267.4	10.5	13.1	-159.58	637.7	98.0	1,028.5	1,012.7	15.79	65.118		
4,600.0	4,580.6	4,428.4	4,379.0	10.8	13.5	-159.62	660.3	99.9	1,056.8	1,040.7	16.18	65.320		
4,700.0	4,680.1	4,534.0	4,482.6	11.0	13.9	-159.66	680.2	101.5	1,084.4	1,067.8	16.55	65.523		
4,800.0	4,779.6	4,640.0	4,587.0	11.3	14.3	-159.71	699.1	103.1	1,110.9	1,093.9	16.92	65.649		
4,900.0	4,879.2	4,749.7	4,695.1	11.5	14.7	-159.76	717.7	104.7	1,136.5	1,119.2	17.30	65.703		
5,000.0	4,978.7	4,835.5	4,779.6	11.7	15.0	-159.80	731.9	105.8	1,161.9	1,144.2	17.63	65.888		
5,100.0	5,078.3	4,941.9	4,884.4	12.0	15.3	-159.84	750.2	107.5	1,187.7	1,169.7	18.01	65.962		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance						Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
5,200.0	5,177.8	5,047.4	4,988.6	12.2	15.7	-159.88	767.1	109.1	1,212.5	1,194.1	18.38	65.978					

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-143.32	-96.2	-71.6	119.9					
100.0	100.0	100.0	100.0	0.1	0.1	-143.32	-96.2	-71.6	119.9	119.6	0.27	440.369		
200.0	200.0	200.0	200.0	0.3	0.3	-143.32	-96.2	-71.6	119.9	119.3	0.62	192.971	CC, ES	
300.0	300.0	296.0	295.9	0.5	0.5	60.76	-97.4	-72.6	120.7	119.7	0.97	124.927		
400.0	399.8	391.7	391.6	0.7	0.7	62.84	-101.1	-75.7	123.3	121.9	1.32	93.038		
500.0	499.5	487.2	486.7	0.9	0.9	66.09	-107.2	-80.8	127.9	126.2	1.71	74.980		
600.0	599.0	582.2	581.0	1.1	1.1	69.37	-115.7	-87.9	136.0	133.9	2.10	64.745		
700.0	698.5	676.6	674.4	1.4	1.4	72.08	-126.5	-97.0	147.7	145.1	2.50	58.999		
800.0	798.1	770.3	766.5	1.6	1.8	74.16	-139.6	-107.9	162.8	159.9	2.91	55.896		
900.0	897.6	863.0	857.1	1.8	2.1	75.66	-154.8	-120.6	181.3	178.0	3.33	54.468		
1,000.0	997.2	960.2	951.7	2.1	2.5	76.81	-172.1	-135.1	201.8	198.0	3.76	53.632		
1,100.0	1,096.7	1,058.1	1,046.8	2.3	3.0	77.76	-189.6	-149.7	222.3	218.1	4.20	52.906		
1,200.0	1,196.2	1,155.9	1,141.9	2.6	3.4	78.55	-207.0	-164.3	242.9	238.2	4.65	52.269		
1,300.0	1,295.8	1,253.7	1,237.1	2.8	3.8	79.21	-224.5	-178.9	263.5	258.4	5.10	51.707		
1,400.0	1,395.3	1,351.5	1,332.2	3.0	4.2	79.78	-241.9	-193.5	284.1	278.6	5.55	51.210		
1,500.0	1,494.9	1,449.3	1,427.3	3.3	4.7	80.27	-259.4	-208.1	304.8	298.8	6.00	50.767		
1,600.0	1,594.4	1,547.1	1,522.4	3.5	5.1	80.70	-276.9	-222.7	325.4	319.0	6.46	50.370		
1,700.0	1,693.9	1,644.9	1,617.6	3.8	5.5	81.08	-294.3	-237.3	346.1	339.2	6.92	50.013		
1,800.0	1,793.5	1,742.7	1,712.7	4.0	6.0	81.41	-311.8	-251.9	366.8	359.5	7.38	49.692		
1,900.0	1,893.0	1,840.6	1,807.8	4.2	6.4	81.71	-329.2	-266.5	387.6	379.7	7.85	49.400		
2,000.0	1,992.5	1,938.4	1,903.0	4.5	6.8	81.98	-346.7	-281.1	408.3	400.0	8.31	49.134		
2,100.0	2,092.1	2,036.2	1,998.1	4.7	7.3	82.22	-364.1	-295.7	429.0	420.2	8.77	48.891		
2,200.0	2,191.6	2,134.0	2,093.2	5.0	7.7	82.44	-381.6	-310.3	449.8	440.5	9.24	48.669		
2,300.0	2,291.2	2,231.8	2,188.3	5.2	8.1	82.64	-399.1	-324.9	470.5	460.8	9.71	48.464		
2,400.0	2,390.7	2,329.6	2,283.5	5.5	8.6	82.83	-416.5	-339.5	491.3	481.1	10.18	48.276		
2,500.0	2,490.2	2,427.4	2,378.6	5.7	9.0	83.00	-434.0	-354.1	512.0	501.4	10.64	48.101		
2,600.0	2,589.8	2,525.2	2,473.7	5.9	9.4	83.15	-451.4	-368.7	532.8	521.7	11.11	47.939		
2,700.0	2,689.3	2,623.0	2,568.8	6.2	9.9	83.30	-468.9	-383.3	553.5	542.0	11.58	47.789		
2,800.0	2,788.9	2,720.9	2,664.0	6.4	10.3	83.43	-486.4	-397.8	574.3	562.3	12.05	47.648		
2,900.0	2,888.4	2,818.7	2,759.1	6.7	10.7	83.55	-503.8	-412.4	595.1	582.6	12.52	47.517		
3,000.0	2,987.9	2,916.5	2,854.2	6.9	11.2	83.67	-521.3	-427.0	615.8	602.9	12.99	47.394		
3,100.0	3,087.5	3,014.3	2,949.4	7.1	11.6	83.78	-538.7	-441.6	636.6	623.2	13.47	47.279		
3,200.0	3,187.0	3,112.1	3,044.5	7.4	12.0	83.88	-556.2	-456.2	657.4	643.5	13.94	47.171		
3,300.0	3,286.6	3,209.9	3,139.6	7.6	12.5	83.98	-573.7	-470.8	678.2	663.8	14.41	47.069		
3,400.0	3,386.1	3,307.7	3,234.7	7.9	12.9	84.06	-591.1	-485.4	699.0	684.1	14.88	46.973		
3,500.0	3,485.6	3,405.5	3,329.9	8.1	13.4	84.15	-608.6	-500.0	719.7	704.4	15.35	46.882		
3,600.0	3,585.2	3,503.3	3,425.0	8.4	13.8	84.23	-626.0	-514.6	740.5	724.7	15.82	46.796		
3,700.0	3,684.7	3,601.2	3,520.1	8.6	14.2	84.30	-643.5	-529.2	761.3	745.0	16.30	46.715		
3,800.0	3,784.3	3,699.0	3,615.2	8.8	14.7	84.38	-660.9	-543.8	782.1	765.3	16.77	46.638		
3,900.0	3,883.8	3,796.8	3,710.4	9.1	15.1	84.44	-678.4	-558.4	802.9	785.6	17.24	46.564		
4,000.0	3,983.3	3,894.6	3,805.5	9.3	15.5	84.51	-695.9	-573.0	823.7	805.9	17.72	46.495		
4,100.0	4,082.9	3,992.4	3,900.6	9.6	16.0	84.57	-713.3	-587.6	844.4	826.3	18.19	46.428		
4,200.0	4,182.4	4,090.2	3,995.8	9.8	16.4	84.63	-730.8	-602.2	865.2	846.6	18.66	46.365		
4,300.0	4,281.9	4,188.0	4,090.9	10.0	16.8	84.68	-748.2	-616.8	886.0	866.9	19.13	46.304		
4,400.0	4,381.5	4,285.8	4,186.0	10.3	17.3	84.74	-765.7	-631.4	906.8	887.2	19.61	46.247		
4,500.0	4,481.0	4,383.6	4,281.1	10.5	17.7	84.79	-783.2	-646.0	927.6	907.5	20.08	46.191		
4,600.0	4,580.6	4,481.5	4,376.3	10.8	18.1	84.83	-800.6	-660.6	948.4	927.8	20.56	46.139		
4,700.0	4,680.1	4,579.3	4,471.4	11.0	18.6	84.88	-818.1	-675.2	969.2	948.2	21.03	46.088		
4,800.0	4,779.6	4,677.1	4,566.5	11.3	19.0	84.93	-835.5	-689.8	990.0	968.5	21.50	46.039		
4,900.0	4,879.2	4,774.9	4,661.6	11.5	19.5	84.97	-853.0	-704.4	1,010.8	988.8	21.98	45.993		
5,000.0	4,978.7	4,872.7	4,756.8	11.7	19.9	85.01	-870.5	-719.0	1,031.6	1,009.1	22.45	45.948		
5,100.0	5,078.3	4,970.5	4,851.9	12.0	20.3	85.05	-887.9	-733.6	1,052.4	1,029.4	22.93	45.905		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis		Separation Factor
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
5,200.0	5,177.8	5,068.3	4,947.0	12.2	20.8	85.09	-905.4	-748.2	1,073.2	1,049.8	23.40	45.863	
5,300.0	5,277.3	5,166.1	5,042.2	12.5	21.2	85.12	-922.8	-762.8	1,094.0	1,070.1	23.87	45.824	
5,400.0	5,376.9	5,264.0	5,137.3	12.7	21.6	85.16	-940.3	-777.4	1,114.8	1,090.4	24.35	45.785	
5,500.0	5,476.4	5,361.8	5,232.4	12.9	22.1	85.19	-957.7	-792.0	1,135.6	1,110.7	24.82	45.748	
5,600.0	5,576.0	5,459.6	5,327.5	13.2	22.5	85.22	-975.2	-806.6	1,156.4	1,131.1	25.30	45.712	
5,700.0	5,675.5	5,557.4	5,422.7	13.4	22.9	85.25	-992.7	-821.1	1,177.1	1,151.4	25.77	45.678	
5,800.0	5,775.0	5,655.2	5,517.8	13.7	23.4	85.28	-1,010.1	-835.7	1,197.9	1,171.7	26.25	45.645	
5,900.0	5,874.6	5,753.0	5,612.9	13.9	23.8	85.31	-1,027.6	-850.3	1,218.7	1,192.0	26.72	45.612 SF	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor					
0.0	0.0	0.0	0.0	0.0	0.0	-143.23	-84.1	-62.9	105.0								
100.0	100.0	100.0	100.0	0.1	0.1	-143.23	-84.1	-62.9	105.0	104.8	0.27	385.788					
200.0	200.0	200.0	200.0	0.3	0.3	-143.23	-84.1	-62.9	105.0	104.4	0.62	169.053					
300.0	300.0	300.0	300.0	0.5	0.5	60.98	-84.1	-62.9	104.2	103.2	0.97	107.050					
389.9	389.7	386.7	386.7	0.7	0.6	63.27	-85.0	-63.9	103.4	102.1	1.30	79.746 CC					
400.0	399.8	396.4	396.4	0.7	0.7	63.63	-85.2	-64.1	103.4	102.1	1.33	77.566 ES					
500.0	499.5	492.6	492.4	0.9	0.8	68.12	-88.3	-67.8	104.9	103.2	1.72	61.099					
600.0	599.0	588.4	587.9	1.1	1.0	72.95	-93.5	-74.0	110.1	108.0	2.11	52.114					
700.0	698.5	683.8	682.6	1.4	1.3	77.20	-100.6	-82.5	119.4	116.9	2.52	47.461					
800.0	798.1	778.5	776.3	1.6	1.6	80.62	-109.8	-93.4	132.5	129.6	2.92	45.337					
900.0	897.6	872.3	868.5	1.8	1.9	83.20	-120.7	-106.5	149.3	145.9	3.33	44.767					
1,000.0	997.2	970.0	964.2	2.1	2.2	85.21	-133.3	-121.6	168.1	164.3	3.76	44.689					
1,100.0	1,096.7	1,068.1	1,060.3	2.3	2.6	86.83	-146.0	-136.6	187.0	182.8	4.19	44.603					
1,200.0	1,196.2	1,166.2	1,156.4	2.6	3.0	88.14	-158.6	-151.7	206.1	201.5	4.63	44.506					
1,300.0	1,295.8	1,264.2	1,252.4	2.8	3.4	89.24	-171.3	-166.8	225.3	220.2	5.07	44.402					
1,400.0	1,395.3	1,362.3	1,348.5	3.0	3.7	90.16	-183.9	-181.9	244.5	239.0	5.52	44.294					
1,500.0	1,494.9	1,460.4	1,444.6	3.3	4.1	90.95	-196.6	-197.0	263.8	257.8	5.97	44.187					
1,600.0	1,594.4	1,558.4	1,540.7	3.5	4.5	91.63	-209.2	-212.1	283.1	276.7	6.42	44.082					
1,700.0	1,693.9	1,656.5	1,636.7	3.8	4.9	92.22	-221.9	-227.1	302.4	295.6	6.88	43.981					
1,800.0	1,793.5	1,754.5	1,732.8	4.0	5.3	92.74	-234.5	-242.2	321.8	314.5	7.33	43.884					
1,900.0	1,893.0	1,852.6	1,828.9	4.2	5.6	93.21	-247.2	-257.3	341.2	333.4	7.79	43.792					
2,000.0	1,992.5	1,950.7	1,924.9	4.5	6.0	93.62	-259.8	-272.4	360.7	352.4	8.25	43.705					
2,100.0	2,092.1	2,048.7	2,021.0	4.7	6.4	93.99	-272.5	-287.5	380.1	371.4	8.71	43.622					
2,200.0	2,191.6	2,146.8	2,117.1	5.0	6.8	94.32	-285.1	-302.5	399.5	390.4	9.18	43.544					
2,300.0	2,291.2	2,244.9	2,213.1	5.2	7.2	94.63	-297.7	-317.6	419.0	409.4	9.64	43.471					
2,400.0	2,390.7	2,342.9	2,309.2	5.5	7.6	94.91	-310.4	-332.7	438.5	428.4	10.10	43.401					
2,500.0	2,490.2	2,441.0	2,405.3	5.7	7.9	95.16	-323.0	-347.8	458.0	447.4	10.57	43.336					
2,600.0	2,589.8	2,539.1	2,501.3	5.9	8.3	95.39	-335.7	-362.9	477.5	466.4	11.03	43.274					
2,700.0	2,689.3	2,637.1	2,597.4	6.2	8.7	95.61	-348.3	-378.0	497.0	485.5	11.50	43.216					
2,800.0	2,788.9	2,735.2	2,693.5	6.4	9.1	95.80	-361.0	-393.0	516.5	504.5	11.97	43.161					
2,900.0	2,888.4	2,833.2	2,789.5	6.7	9.5	95.99	-373.6	-408.1	536.0	523.5	12.43	43.109					
3,000.0	2,987.9	2,931.3	2,885.6	6.9	9.9	96.16	-386.3	-423.2	555.5	542.6	12.90	43.060					
3,100.0	3,087.5	3,029.4	2,981.7	7.1	10.3	96.32	-398.9	-438.3	575.0	561.7	13.37	43.013					
3,200.0	3,187.0	3,127.4	3,077.8	7.4	10.6	96.47	-411.6	-453.4	594.5	580.7	13.84	42.969					
3,300.0	3,286.6	3,225.5	3,173.8	7.6	11.0	96.61	-424.2	-468.4	614.1	599.8	14.31	42.927					
3,400.0	3,386.1	3,323.6	3,269.9	7.9	11.4	96.74	-436.8	-483.5	633.6	618.8	14.77	42.887					
3,500.0	3,485.6	3,421.6	3,366.0	8.1	11.8	96.86	-449.5	-498.6	653.1	637.9	15.24	42.849					
3,600.0	3,585.2	3,519.7	3,462.0	8.4	12.2	96.97	-462.1	-513.7	672.7	657.0	15.71	42.813					
3,700.0	3,684.7	3,617.8	3,558.1	8.6	12.6	97.08	-474.8	-528.8	692.2	676.0	16.18	42.778					
3,800.0	3,784.3	3,715.8	3,654.2	8.8	13.0	97.19	-487.4	-543.9	711.8	695.1	16.65	42.745					
3,900.0	3,883.8	3,813.9	3,750.2	9.1	13.4	97.28	-500.1	-558.9	731.3	714.2	17.12	42.714					
4,000.0	3,983.3	3,912.0	3,846.3	9.3	13.7	97.38	-512.7	-574.0	750.9	733.3	17.59	42.684					
4,100.0	4,082.9	4,010.0	3,942.4	9.6	14.1	97.47	-525.4	-589.1	770.4	752.3	18.06	42.655					
4,200.0	4,182.4	4,108.1	4,038.4	9.8	14.5	97.55	-538.0	-604.2	789.9	771.4	18.53	42.628					
4,300.0	4,281.9	4,206.1	4,134.5	10.0	14.9	97.63	-550.7	-619.3	809.5	790.5	19.00	42.601					
4,400.0	4,381.5	4,304.2	4,230.6	10.3	15.3	97.70	-563.3	-634.3	829.1	809.6	19.47	42.576					
4,500.0	4,481.0	4,402.3	4,326.6	10.5	15.7	97.78	-576.0	-649.4	848.6	828.7	19.94	42.552					
4,600.0	4,580.6	4,500.3	4,422.7	10.8	16.1	97.85	-588.6	-664.5	868.2	847.7	20.41	42.528					
4,700.0	4,680.1	4,598.4	4,518.8	11.0	16.4	97.91	-601.2	-679.6	887.7	866.8	20.88	42.506					
4,800.0	4,779.6	4,696.5	4,614.9	11.3	16.8	97.97	-613.9	-694.7	907.3	885.9	21.36	42.484					
4,900.0	4,879.2	4,794.5	4,710.9	11.5	17.2	98.04	-626.5	-709.8	926.8	905.0	21.83	42.464					
5,000.0	4,978.7	4,892.6	4,807.0	11.7	17.6	98.09	-639.2	-724.8	946.4	924.1	22.30	42.444					

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,078.3	4,990.7	4,903.1	12.0	18.0	98.15	-651.8	-739.9	966.0	943.2	22.77	42.424		
5,200.0	5,177.8	5,088.7	4,999.1	12.2	18.4	98.20	-664.5	-755.0	985.5	962.3	23.24	42.406		
5,300.0	5,277.3	5,186.8	5,095.2	12.5	18.8	98.25	-677.1	-770.1	1,005.1	981.4	23.71	42.388		
5,400.0	5,376.9	5,284.8	5,191.3	12.7	19.2	98.30	-689.8	-785.2	1,024.6	1,000.5	24.18	42.371		
5,500.0	5,476.4	5,382.9	5,287.3	12.9	19.5	98.35	-702.4	-800.2	1,044.2	1,019.6	24.65	42.354		
5,600.0	5,576.0	5,481.0	5,383.4	13.2	19.9	98.40	-715.1	-815.3	1,063.8	1,038.6	25.13	42.338		
5,700.0	5,675.5	5,579.0	5,479.5	13.4	20.3	98.44	-727.7	-830.4	1,083.3	1,057.7	25.60	42.322		
5,800.0	5,775.0	5,677.1	5,575.5	13.7	20.7	98.48	-740.4	-845.5	1,102.9	1,076.8	26.07	42.307		
5,900.0	5,874.6	5,775.2	5,671.6	13.9	21.1	98.52	-753.0	-860.6	1,122.5	1,095.9	26.54	42.292		
6,000.0	5,974.1	5,873.2	5,767.7	14.2	21.5	98.56	-765.6	-875.6	1,142.0	1,115.0	27.01	42.278		
6,100.0	6,073.6	5,971.3	5,863.7	14.4	21.9	98.60	-778.3	-890.7	1,161.6	1,134.1	27.48	42.265		
6,200.0	6,173.2	6,069.4	5,959.8	14.6	22.3	98.64	-790.9	-905.8	1,181.2	1,153.2	27.96	42.251		
6,300.0	6,272.7	6,167.4	6,055.9	14.9	22.6	98.68	-803.6	-920.9	1,200.7	1,172.3	28.43	42.238		
6,400.0	6,372.3	6,265.5	6,151.9	15.1	23.0	98.71	-816.2	-936.0	1,220.3	1,191.4	28.90	42.226 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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													Offset Site Error:	0.0 ft
Sec 6 T6S R96W (F06 696) - Chevron 6-34D - DD - Plan #2													Offset Well Error:	0.0 ft
Survey Program: 0-MWD														
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-143.25	-72.1	-53.9	90.0					
100.0	100.0	100.0	100.0	0.1	0.1	-143.25	-72.1	-53.9	90.0	89.7	0.27	330.586		
200.0	200.0	200.0	200.0	0.3	0.3	-143.25	-72.1	-53.9	90.0	89.4	0.62	144.864		
300.0	300.0	300.0	300.0	0.5	0.5	61.10	-72.1	-53.9	89.2	88.2	0.97	91.607		
400.0	399.8	399.8	399.8	0.7	0.7	64.17	-72.1	-53.9	86.7	85.4	1.34	64.779		
500.0	499.5	499.5	499.5	0.9	0.8	69.53	-72.1	-53.9	83.3	81.6	1.73	48.194		
577.9	577.0	574.9	574.9	1.1	1.0	74.45	-72.6	-54.7	82.0	80.0	2.04	40.198 CC, ES		
600.0	599.0	596.3	596.3	1.1	1.0	75.91	-72.9	-55.3	82.1	80.0	2.13	38.573		
700.0	698.5	692.9	692.8	1.4	1.2	82.48	-75.2	-59.6	85.4	82.8	2.54	33.668		
800.0	798.1	789.2	788.7	1.6	1.4	88.35	-79.1	-66.7	93.1	90.1	2.94	31.622		
900.0	897.6	884.9	883.7	1.8	1.6	93.01	-84.4	-76.6	104.9	101.6	3.35	31.327 SF		
1,000.0	997.2	979.8	977.5	2.1	1.9	96.38	-91.2	-89.1	120.5	116.8	3.76	32.097		
1,100.0	1,096.7	1,074.8	1,071.0	2.3	2.2	98.68	-99.4	-104.3	139.5	135.4	4.17	33.491		
1,200.0	1,196.2	1,172.7	1,167.0	2.6	2.5	100.39	-108.3	-120.7	159.6	155.0	4.59	34.773		
1,300.0	1,295.8	1,270.5	1,263.1	2.8	2.8	101.72	-117.2	-137.1	179.7	174.7	5.02	35.828		
1,400.0	1,395.3	1,368.4	1,359.2	3.0	3.2	102.79	-126.1	-153.5	199.9	194.5	5.45	36.702		
1,500.0	1,494.9	1,466.3	1,455.3	3.3	3.5	103.66	-135.0	-169.9	220.2	214.3	5.88	37.433		
1,600.0	1,594.4	1,564.2	1,551.4	3.5	3.9	104.38	-143.9	-186.3	240.5	234.2	6.32	38.052		
1,700.0	1,693.9	1,662.0	1,647.4	3.8	4.3	104.99	-152.8	-202.7	260.8	254.1	6.76	38.579		
1,800.0	1,793.5	1,759.9	1,743.5	4.0	4.6	105.51	-161.6	-219.1	281.2	274.0	7.20	39.034		
1,900.0	1,893.0	1,857.8	1,839.6	4.2	5.0	105.96	-170.5	-235.5	301.6	293.9	7.65	39.428		
2,000.0	1,992.5	1,955.7	1,935.7	4.5	5.3	106.36	-179.4	-251.9	322.0	313.9	8.09	39.774		
2,100.0	2,092.1	2,053.5	2,031.8	4.7	5.7	106.70	-188.3	-268.3	342.4	333.8	8.54	40.078		
2,200.0	2,191.6	2,151.4	2,127.8	5.0	6.1	107.01	-197.2	-284.8	362.8	353.8	8.99	40.348		
2,300.0	2,291.2	2,249.3	2,223.9	5.2	6.4	107.29	-206.1	-301.2	383.2	373.8	9.44	40.589		
2,400.0	2,390.7	2,347.2	2,320.0	5.5	6.8	107.54	-214.9	-317.6	403.6	393.8	9.89	40.805		
2,500.0	2,490.2	2,445.0	2,416.1	5.7	7.2	107.76	-223.8	-334.0	424.1	413.7	10.34	40.999		
2,600.0	2,589.8	2,542.9	2,512.2	5.9	7.5	107.96	-232.7	-350.4	444.5	433.7	10.80	41.176		
2,700.0	2,689.3	2,640.8	2,608.2	6.2	7.9	108.15	-241.6	-366.8	465.0	453.7	11.25	41.336		
2,800.0	2,788.9	2,738.7	2,704.3	6.4	8.3	108.32	-250.5	-383.2	485.4	473.7	11.70	41.482		
2,900.0	2,888.4	2,836.5	2,800.4	6.7	8.6	108.47	-259.4	-399.6	505.9	493.7	12.16	41.617		
3,000.0	2,987.9	2,934.4	2,896.5	6.9	9.0	108.62	-268.3	-416.0	526.4	513.8	12.61	41.740		
3,100.0	3,087.5	3,032.3	2,992.6	7.1	9.4	108.75	-277.1	-432.4	546.8	533.8	13.07	41.854		
3,200.0	3,187.0	3,130.2	3,088.6	7.4	9.8	108.87	-286.0	-448.8	567.3	553.8	13.52	41.959		
3,300.0	3,286.6	3,228.0	3,184.7	7.6	10.1	108.99	-294.9	-465.2	587.8	573.8	13.98	42.056		
3,400.0	3,386.1	3,325.9	3,280.8	7.9	10.5	109.09	-303.8	-481.6	608.2	593.8	14.43	42.147		
3,500.0	3,485.6	3,423.8	3,376.9	8.1	10.9	109.19	-312.7	-498.0	628.7	613.8	14.89	42.232		
3,600.0	3,585.2	3,521.7	3,473.0	8.4	11.2	109.29	-321.6	-514.4	649.2	633.9	15.34	42.311		
3,700.0	3,684.7	3,619.5	3,569.1	8.6	11.6	109.38	-330.5	-530.8	669.7	653.9	15.80	42.385		
3,800.0	3,784.3	3,717.4	3,665.1	8.8	12.0	109.46	-339.3	-547.2	690.2	673.9	16.26	42.454		
3,900.0	3,883.8	3,815.3	3,761.2	9.1	12.3	109.54	-348.2	-563.6	710.6	693.9	16.71	42.519		
4,000.0	3,983.3	3,913.2	3,857.3	9.3	12.7	109.61	-357.1	-580.1	731.1	714.0	17.17	42.581		
4,100.0	4,082.9	4,011.0	3,953.4	9.6	13.1	109.68	-366.0	-596.5	751.6	734.0	17.63	42.639		
4,200.0	4,182.4	4,108.9	4,049.5	9.8	13.5	109.75	-374.9	-612.9	772.1	754.0	18.08	42.693		
4,300.0	4,281.9	4,206.8	4,145.5	10.0	13.8	109.81	-383.8	-629.3	792.6	774.0	18.54	42.745		
4,400.0	4,381.5	4,304.7	4,241.6	10.3	14.2	109.87	-392.7	-645.7	813.1	794.1	19.00	42.794		
4,500.0	4,481.0	4,402.5	4,337.7	10.5	14.6	109.92	-401.5	-662.1	833.6	814.1	19.46	42.841		
4,600.0	4,580.6	4,500.4	4,433.8	10.8	14.9	109.98	-410.4	-678.5	854.0	834.1	19.91	42.885		
4,700.0	4,680.1	4,598.3	4,529.9	11.0	15.3	110.03	-419.3	-694.9	874.5	854.2	20.37	42.927		
4,800.0	4,779.6	4,696.2	4,625.9	11.3	15.7	110.08	-428.2	-711.3	895.0	874.2	20.83	42.967		
4,900.0	4,879.2	4,794.1	4,722.0	11.5	16.0	110.13	-437.1	-727.7	915.5	894.2	21.29	43.005		
5,000.0	4,978.7	4,891.9	4,818.1	11.7	16.4	110.17	-446.0	-744.1	936.0	914.3	21.75	43.042		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,078.3	4,989.8	4,914.2	12.0	16.8	110.21	-454.9	-760.5	956.5	934.3	22.20	43.076		
5,200.0	5,177.8	5,087.7	5,010.3	12.2	17.2	110.25	-463.7	-776.9	977.0	954.3	22.66	43.110		
5,300.0	5,277.3	5,185.6	5,106.3	12.5	17.5	110.29	-472.6	-793.3	997.5	974.4	23.12	43.142		
5,400.0	5,376.9	5,283.4	5,202.4	12.7	17.9	110.33	-481.5	-809.7	1,018.0	994.4	23.58	43.172		
5,500.0	5,476.4	5,381.3	5,298.5	12.9	18.3	110.37	-490.4	-826.1	1,038.5	1,014.4	24.04	43.201		
5,600.0	5,576.0	5,479.2	5,394.6	13.2	18.6	110.40	-499.3	-842.5	1,059.0	1,034.5	24.50	43.229		
5,700.0	5,675.5	5,577.1	5,490.7	13.4	19.0	110.44	-508.2	-858.9	1,079.4	1,054.5	24.95	43.256		
5,800.0	5,775.0	5,674.9	5,586.8	13.7	19.4	110.47	-517.1	-875.4	1,099.9	1,074.5	25.41	43.282		
5,900.0	5,874.6	5,772.8	5,682.8	13.9	19.8	110.50	-525.9	-891.8	1,120.4	1,094.6	25.87	43.307		
6,000.0	5,974.1	5,870.7	5,778.9	14.2	20.1	110.53	-534.8	-908.2	1,140.9	1,114.6	26.33	43.331		
6,100.0	6,073.6	5,968.6	5,875.0	14.4	20.5	110.56	-543.7	-924.6	1,161.4	1,134.6	26.79	43.354		
6,200.0	6,173.2	6,066.4	5,971.1	14.6	20.9	110.59	-552.6	-941.0	1,181.9	1,154.7	27.25	43.377		
6,300.0	6,272.7	6,164.3	6,067.2	14.9	21.2	110.61	-561.5	-957.4	1,202.4	1,174.7	27.71	43.398		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-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	275.385		
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		
300.0	300.0	300.0	300.0	0.5	0.5	61.27	-60.1	-44.8	74.1	73.2	0.97	76.164		
400.0	399.8	397.8	397.8	0.7	0.7	65.66	-60.4	-46.5	73.1	71.8	1.34	54.684		
404.9	404.7	402.6	402.6	0.7	0.7	65.98	-60.5	-46.6	73.1	71.8	1.36	53.921 CC, ES		
500.0	499.5	495.1	495.0	0.9	0.8	73.82	-61.4	-51.3	74.5	72.7	1.73	43.059		
600.0	599.0	591.8	591.3	1.1	1.1	82.99	-63.0	-59.4	80.4	78.3	2.13	37.679		
700.0	698.5	687.6	686.4	1.4	1.3	91.09	-65.2	-70.5	91.4	88.9	2.53	36.075 SF		
800.0	798.1	782.4	780.1	1.6	1.6	97.48	-67.9	-84.6	107.3	104.3	2.93	36.633		
900.0	897.6	880.1	876.4	1.8	1.9	102.35	-71.1	-100.7	125.8	122.5	3.32	37.856		
1,000.0	997.2	977.9	972.8	2.1	2.2	105.97	-74.3	-116.9	145.0	141.3	3.72	38.980		
1,100.0	1,096.7	1,075.7	1,069.2	2.3	2.5	108.74	-77.5	-133.0	164.7	160.6	4.12	39.960		
1,200.0	1,196.2	1,173.4	1,165.6	2.6	2.9	110.91	-80.7	-149.2	184.6	180.1	4.52	40.800		
1,300.0	1,295.8	1,271.2	1,262.0	2.8	3.2	112.66	-83.9	-165.3	204.8	199.8	4.93	41.517		
1,400.0	1,395.3	1,369.0	1,358.3	3.0	3.5	114.10	-87.1	-181.5	225.1	219.7	5.34	42.130		
1,500.0	1,494.9	1,466.8	1,454.7	3.3	3.8	115.30	-90.3	-197.7	245.5	239.7	5.75	42.658		
1,600.0	1,594.4	1,564.5	1,551.1	3.5	4.2	116.31	-93.4	-213.8	266.0	259.8	6.17	43.113		
1,700.0	1,693.9	1,662.3	1,647.5	3.8	4.5	117.18	-96.6	-230.0	286.5	280.0	6.59	43.511		
1,800.0	1,793.5	1,760.1	1,743.8	4.0	4.8	117.94	-99.8	-246.1	307.2	300.2	7.00	43.859		
1,900.0	1,893.0	1,857.9	1,840.2	4.2	5.2	118.59	-103.0	-262.3	327.8	320.4	7.42	44.166		
2,000.0	1,992.5	1,955.6	1,936.6	4.5	5.5	119.18	-106.2	-278.4	348.5	340.7	7.84	44.439		
2,100.0	2,092.1	2,053.4	2,033.0	4.7	5.8	119.69	-109.4	-294.6	369.3	361.0	8.26	44.682		
2,200.0	2,191.6	2,151.2	2,129.4	5.0	6.2	120.15	-112.6	-310.7	390.0	381.3	8.69	44.901		
2,300.0	2,291.2	2,249.0	2,225.7	5.2	6.5	120.57	-115.7	-326.9	410.8	401.7	9.11	45.098		
2,400.0	2,390.7	2,346.7	2,322.1	5.5	6.8	120.94	-118.9	-343.1	431.6	422.1	9.53	45.277		
2,500.0	2,490.2	2,444.5	2,418.5	5.7	7.2	121.28	-122.1	-359.2	452.4	442.5	9.96	45.439		
2,600.0	2,589.8	2,542.3	2,514.9	5.9	7.5	121.59	-125.3	-375.4	473.3	462.9	10.38	45.588		
2,700.0	2,689.3	2,640.1	2,611.3	6.2	7.9	121.87	-128.5	-391.5	494.1	483.3	10.81	45.724		
2,800.0	2,788.9	2,737.8	2,707.6	6.4	8.2	122.13	-131.7	-407.7	514.9	503.7	11.23	45.850		
2,900.0	2,888.4	2,835.6	2,804.0	6.7	8.5	122.37	-134.9	-423.8	535.8	524.1	11.66	45.965		
3,000.0	2,987.9	2,933.4	2,900.4	6.9	8.9	122.60	-138.1	-440.0	556.7	544.6	12.08	46.072		
3,100.0	3,087.5	3,031.2	2,996.8	7.1	9.2	122.80	-141.2	-456.1	577.6	565.0	12.51	46.172		
3,200.0	3,187.0	3,129.0	3,093.2	7.4	9.5	123.00	-144.4	-472.3	598.4	585.5	12.94	46.264		
3,300.0	3,286.6	3,226.7	3,189.5	7.6	9.9	123.18	-147.6	-488.4	619.3	606.0	13.36	46.350		
3,400.0	3,386.1	3,324.5	3,285.9	7.9	10.2	123.34	-150.8	-504.6	640.2	626.4	13.79	46.431		
3,500.0	3,485.6	3,422.3	3,382.3	8.1	10.5	123.50	-154.0	-520.8	661.1	646.9	14.22	46.507		
3,600.0	3,585.2	3,520.1	3,478.7	8.4	10.9	123.65	-157.2	-536.9	682.0	667.4	14.64	46.577		
3,700.0	3,684.7	3,617.8	3,575.1	8.6	11.2	123.79	-160.4	-553.1	702.9	687.9	15.07	46.644		
3,800.0	3,784.3	3,715.6	3,671.4	8.8	11.6	123.92	-163.6	-569.2	723.9	708.4	15.50	46.707		
3,900.0	3,883.8	3,813.4	3,767.8	9.1	11.9	124.04	-166.7	-585.4	744.8	728.8	15.93	46.766		
4,000.0	3,983.3	3,911.2	3,864.2	9.3	12.2	124.16	-169.9	-601.5	765.7	749.3	16.35	46.822		
4,100.0	4,082.9	4,008.9	3,960.6	9.6	12.6	124.27	-173.1	-617.7	786.6	769.8	16.78	46.875		
4,200.0	4,182.4	4,106.7	4,057.0	9.8	12.9	124.37	-176.3	-633.8	807.5	790.3	17.21	46.926		
4,300.0	4,281.9	4,204.5	4,153.3	10.0	13.2	124.47	-179.5	-650.0	828.5	810.8	17.64	46.973		
4,400.0	4,381.5	4,302.3	4,249.7	10.3	13.6	124.56	-182.7	-666.1	849.4	831.3	18.06	47.019		
4,500.0	4,481.0	4,400.0	4,346.1	10.5	13.9	124.65	-185.9	-682.3	870.3	851.8	18.49	47.062		
4,600.0	4,580.6	4,497.8	4,442.5	10.8	14.3	124.74	-189.1	-698.5	891.3	872.3	18.92	47.103		
4,700.0	4,680.1	4,595.6	4,538.9	11.0	14.6	124.82	-192.2	-714.6	912.2	892.8	19.35	47.142		
4,800.0	4,779.6	4,693.4	4,635.2	11.3	14.9	124.90	-195.4	-730.8	933.1	913.3	19.78	47.180		
4,900.0	4,879.2	4,791.1	4,731.6	11.5	15.3	124.97	-198.6	-746.9	954.1	933.9	20.21	47.216		
5,000.0	4,978.7	4,888.9	4,828.0	11.7	15.6	125.04	-201.8	-763.1	975.0	954.4	20.64	47.250		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,078.3	4,986.7	4,924.4	12.0	15.9	125.11	-205.0	-779.2	995.9	974.9	21.06	47.283		
5,200.0	5,177.8	5,084.5	5,020.8	12.2	16.3	125.18	-208.2	-795.4	1,016.9	995.4	21.49	47.314		
5,300.0	5,277.3	5,182.2	5,117.1	12.5	16.6	125.24	-211.4	-811.5	1,037.8	1,015.9	21.92	47.344		
5,400.0	5,376.9	5,280.0	5,213.5	12.7	17.0	125.30	-214.6	-827.7	1,058.8	1,036.4	22.35	47.373		
5,500.0	5,476.4	5,377.8	5,309.9	12.9	17.3	125.36	-217.7	-843.9	1,079.7	1,056.9	22.78	47.401		
5,600.0	5,576.0	5,475.6	5,406.3	13.2	17.6	125.42	-220.9	-860.0	1,100.7	1,077.5	23.21	47.428		
5,700.0	5,675.5	5,573.4	5,502.6	13.4	18.0	125.47	-224.1	-876.2	1,121.6	1,098.0	23.64	47.454		
5,800.0	5,775.0	5,671.1	5,599.0	13.7	18.3	125.52	-227.3	-892.3	1,142.6	1,118.5	24.06	47.479		
5,900.0	5,874.6	5,768.9	5,695.4	13.9	18.6	125.57	-230.5	-908.5	1,163.5	1,139.0	24.49	47.502		
6,000.0	5,974.1	5,866.7	5,791.8	14.2	19.0	125.62	-233.7	-924.6	1,184.5	1,159.5	24.92	47.526		
6,100.0	6,073.6	5,964.5	5,888.2	14.4	19.3	125.67	-236.9	-940.8	1,205.4	1,180.1	25.35	47.548		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-143.32	-48.1	-35.8	60.0					
100.0	100.0	100.0	100.0	0.1	0.1	-143.32	-48.1	-35.8	60.0	59.7	0.27	220.185		
200.0	200.0	200.0	200.0	0.3	0.3	-143.32	-48.1	-35.8	60.0	59.3	0.62	96.485 CC		
204.1	204.1	204.0	204.0	0.3	0.3	60.04	-48.1	-35.8	60.0	59.3	0.64	94.305		
300.0	300.0	298.8	298.8	0.5	0.5	62.84	-48.0	-37.5	60.1	59.1	0.97	61.690 ES		
400.0	399.8	397.1	396.9	0.7	0.7	70.99	-47.6	-42.6	61.3	60.0	1.35	45.423		
500.0	499.5	494.4	493.9	0.9	0.9	83.17	-46.9	-50.9	66.0	64.2	1.75	37.634		
600.0	599.0	590.6	589.4	1.1	1.2	95.03	-46.1	-62.3	76.5	74.3	2.15	35.552 SF		
700.0	698.5	686.4	684.1	1.4	1.4	104.26	-45.0	-76.8	92.6	90.1	2.53	36.577		
800.0	798.1	784.0	780.4	1.6	1.7	110.85	-43.8	-92.3	111.3	108.4	2.91	38.289		
900.0	897.6	881.5	876.7	1.8	2.1	115.53	-42.6	-107.8	131.1	127.8	3.28	39.925		
1,000.0	997.2	979.1	973.0	2.1	2.4	118.97	-41.4	-123.4	151.4	147.8	3.66	41.367		
1,100.0	1,096.7	1,076.6	1,069.3	2.3	2.7	121.59	-40.2	-138.9	172.2	168.2	4.04	42.605		
1,200.0	1,196.2	1,174.2	1,165.6	2.6	3.0	123.65	-39.0	-154.4	193.3	188.8	4.43	43.662		
1,300.0	1,295.8	1,271.7	1,261.9	2.8	3.3	125.31	-37.9	-169.9	214.5	209.7	4.81	44.565		
1,400.0	1,395.3	1,369.3	1,358.2	3.0	3.6	126.66	-36.7	-185.5	235.9	230.7	5.20	45.342		
1,500.0	1,494.9	1,466.8	1,454.5	3.3	4.0	127.79	-35.5	-201.0	257.4	251.8	5.59	46.015		
1,600.0	1,594.4	1,564.4	1,550.8	3.5	4.3	128.75	-34.3	-216.5	278.9	272.9	5.99	46.601		
1,700.0	1,693.9	1,661.9	1,647.1	3.8	4.6	129.57	-33.1	-232.1	300.5	294.2	6.38	47.117		
1,800.0	1,793.5	1,759.5	1,743.4	4.0	4.9	130.28	-31.9	-247.6	322.2	315.5	6.77	47.572		
1,900.0	1,893.0	1,857.0	1,839.7	4.2	5.2	130.90	-30.8	-263.1	343.9	336.8	7.17	47.977		
2,000.0	1,992.5	1,954.6	1,936.0	4.5	5.6	131.45	-29.6	-278.7	365.7	358.1	7.57	48.339		
2,100.0	2,092.1	2,052.1	2,032.3	4.7	5.9	131.93	-28.4	-294.2	387.5	379.5	7.96	48.665		
2,200.0	2,191.6	2,149.7	2,128.6	5.0	6.2	132.36	-27.2	-309.7	409.3	400.9	8.36	48.960		
2,300.0	2,291.2	2,247.2	2,224.9	5.2	6.5	132.75	-26.0	-325.3	431.1	422.3	8.76	49.228		
2,400.0	2,390.7	2,344.8	2,321.2	5.5	6.9	133.11	-24.8	-340.8	452.9	443.8	9.16	49.471		
2,500.0	2,490.2	2,442.3	2,417.5	5.7	7.2	133.43	-23.7	-356.3	474.8	465.2	9.55	49.695		
2,600.0	2,589.8	2,539.9	2,513.8	5.9	7.5	133.72	-22.5	-371.9	496.7	486.7	9.95	49.900		
2,700.0	2,689.3	2,637.4	2,610.1	6.2	7.8	133.98	-21.3	-387.4	518.5	508.2	10.35	50.089		
2,800.0	2,788.9	2,735.0	2,706.4	6.4	8.2	134.23	-20.1	-402.9	540.4	529.7	10.75	50.264		
2,900.0	2,888.4	2,832.5	2,802.7	6.7	8.5	134.46	-18.9	-418.4	562.3	551.2	11.15	50.426		
3,000.0	2,987.9	2,930.1	2,899.0	6.9	8.8	134.67	-17.7	-434.0	584.2	572.7	11.55	50.576		
3,100.0	3,087.5	3,027.6	2,995.3	7.1	9.1	134.86	-16.6	-449.5	606.2	594.2	11.95	50.717		
3,200.0	3,187.0	3,125.2	3,091.5	7.4	9.4	135.04	-15.4	-465.0	628.1	615.7	12.35	50.848		
3,300.0	3,286.6	3,222.7	3,187.8	7.6	9.8	135.21	-14.2	-480.6	650.0	637.3	12.75	50.970		
3,400.0	3,386.1	3,320.2	3,284.1	7.9	10.1	135.37	-13.0	-496.1	671.9	658.8	13.15	51.086		
3,500.0	3,485.6	3,417.8	3,380.4	8.1	10.4	135.51	-11.8	-511.6	693.9	680.3	13.55	51.194		
3,600.0	3,585.2	3,515.3	3,476.7	8.4	10.7	135.65	-10.6	-527.2	715.8	701.9	13.95	51.296		
3,700.0	3,684.7	3,612.9	3,573.0	8.6	11.1	135.78	-9.5	-542.7	737.7	723.4	14.36	51.392		
3,800.0	3,784.3	3,710.4	3,669.3	8.8	11.4	135.91	-8.3	-558.2	759.7	744.9	14.76	51.483		
3,900.0	3,883.8	3,808.0	3,765.6	9.1	11.7	136.02	-7.1	-573.8	781.6	766.5	15.16	51.569		
4,000.0	3,983.3	3,905.5	3,861.9	9.3	12.0	136.13	-5.9	-589.3	803.6	788.0	15.56	51.650		
4,100.0	4,082.9	4,003.1	3,958.2	9.6	12.4	136.23	-4.7	-604.8	825.6	809.6	15.96	51.727		
4,200.0	4,182.4	4,100.6	4,054.5	9.8	12.7	136.33	-3.5	-620.3	847.5	831.1	16.36	51.801		
4,300.0	4,281.9	4,198.2	4,150.8	10.0	13.0	136.43	-2.4	-635.9	869.5	852.7	16.76	51.871		
4,400.0	4,381.5	4,295.7	4,247.1	10.3	13.3	136.51	-1.2	-651.4	891.4	874.3	17.16	51.937		
4,500.0	4,481.0	4,393.3	4,343.4	10.5	13.6	136.60	0.0	-666.9	913.4	895.8	17.56	52.001		
4,600.0	4,580.6	4,490.8	4,439.7	10.8	14.0	136.68	1.2	-682.5	935.4	917.4	17.97	52.061		
4,700.0	4,680.1	4,588.4	4,536.0	11.0	14.3	136.76	2.4	-698.0	957.3	939.0	18.37	52.119		
4,800.0	4,779.6	4,685.9	4,632.3	11.3	14.6	136.83	3.6	-713.5	979.3	960.5	18.77	52.175		
4,900.0	4,879.2	4,783.5	4,728.6	11.5	14.9	136.90	4.7	-729.1	1,001.3	982.1	19.17	52.228		
5,000.0	4,978.7	4,881.0	4,824.9	11.7	15.3	136.97	5.9	-744.6	1,023.2	1,003.7	19.57	52.279		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,078.3	4,978.6	4,921.2	12.0	15.6	137.03	7.1	-760.1	1,045.2	1,025.2	19.97	52.328		
5,200.0	5,177.8	5,076.1	5,017.5	12.2	15.9	137.09	8.3	-775.7	1,067.2	1,046.8	20.38	52.374		
5,300.0	5,277.3	5,173.7	5,113.8	12.5	16.2	137.15	9.5	-791.2	1,089.2	1,068.4	20.78	52.419		
5,400.0	5,376.9	5,271.2	5,210.1	12.7	16.6	137.21	10.7	-806.7	1,111.1	1,090.0	21.18	52.463		
5,500.0	5,476.4	5,368.8	5,306.4	12.9	16.9	137.26	11.8	-822.3	1,133.1	1,111.5	21.58	52.504		
5,600.0	5,576.0	5,466.3	5,402.7	13.2	17.2	137.32	13.0	-837.8	1,155.1	1,133.1	21.98	52.544		
5,700.0	5,675.5	5,563.9	5,499.0	13.4	17.5	137.37	14.2	-853.3	1,177.1	1,154.7	22.38	52.583		
5,800.0	5,775.0	5,661.4	5,595.3	13.7	17.9	137.42	15.4	-868.8	1,199.0	1,176.3	22.79	52.620		
5,900.0	5,874.6	5,759.0	5,691.6	13.9	18.2	137.46	16.6	-884.4	1,221.0	1,197.8	23.19	52.656		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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 6-37D - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-143.39	-36.1	-26.8	44.9					
100.0	100.0	100.0	100.0	0.1	0.1	-143.39	-36.1	-26.8	44.9	44.6	0.27	164.984		
200.0	200.0	200.0	200.0	0.3	0.3	-143.39	-36.1	-26.8	44.9	44.3	0.62	72.296		
300.0	300.0	300.0	300.0	0.5	0.5	61.95	-36.1	-26.8	44.1	43.1	0.97	45.284		
400.0	399.8	399.2	399.2	0.7	0.7	70.34	-35.5	-28.4	42.6	41.3	1.34	31.761		
423.1	422.8	421.9	421.9	0.7	0.7	73.49	-35.2	-29.2	42.5	41.1	1.43	29.650 CC, ES		
500.0	499.5	497.5	497.4	0.9	0.8	86.83	-33.8	-33.2	44.0	42.2	1.74	25.197		
600.0	599.0	594.8	594.3	1.1	1.1	104.11	-30.9	-41.0	51.8	49.7	2.14	24.211 SF		
700.0	698.5	691.0	689.8	1.4	1.3	116.86	-27.0	-51.9	66.4	63.9	2.51	26.460		
800.0	798.1	785.9	783.6	1.6	1.6	125.08	-22.1	-65.5	86.3	83.5	2.86	30.164		
900.0	897.6	882.0	878.2	1.8	1.9	130.34	-16.4	-81.4	109.7	106.5	3.21	34.133		
1,000.0	997.2	978.8	973.5	2.1	2.2	133.77	-10.6	-97.5	133.8	130.2	3.57	37.459		
1,100.0	1,096.7	1,075.6	1,068.8	2.3	2.6	136.15	-4.8	-113.6	158.2	154.2	3.93	40.222		
1,200.0	1,196.2	1,172.4	1,164.0	2.6	2.9	137.90	1.0	-129.8	182.7	178.4	4.30	42.534		
1,300.0	1,295.8	1,269.2	1,259.3	2.8	3.2	139.23	6.8	-145.9	207.4	202.8	4.66	44.487		
1,400.0	1,395.3	1,366.1	1,354.6	3.0	3.6	140.28	12.6	-162.0	232.2	227.2	5.03	46.153		
1,500.0	1,494.9	1,462.9	1,449.9	3.3	3.9	141.13	18.4	-178.2	257.0	251.6	5.40	47.588		
1,600.0	1,594.4	1,559.7	1,545.1	3.5	4.3	141.83	24.2	-194.3	281.9	276.1	5.77	48.836		
1,700.0	1,693.9	1,656.5	1,640.4	3.8	4.6	142.41	30.0	-210.4	306.8	300.7	6.14	49.930		
1,800.0	1,793.5	1,753.3	1,735.7	4.0	4.9	142.91	35.8	-226.5	331.7	325.2	6.52	50.895		
1,900.0	1,893.0	1,850.1	1,831.0	4.2	5.3	143.33	41.6	-242.7	356.7	349.8	6.89	51.753		
2,000.0	1,992.5	1,946.9	1,926.2	4.5	5.6	143.71	47.5	-258.8	381.7	374.4	7.27	52.521		
2,100.0	2,092.1	2,043.7	2,021.5	4.7	6.0	144.03	53.3	-274.9	406.6	399.0	7.64	53.211		
2,200.0	2,191.6	2,140.5	2,116.8	5.0	6.3	144.32	59.1	-291.0	431.6	423.6	8.02	53.836		
2,300.0	2,291.2	2,237.3	2,212.1	5.2	6.7	144.58	64.9	-307.2	456.6	448.2	8.39	54.402		
2,400.0	2,390.7	2,334.1	2,307.3	5.5	7.0	144.81	70.7	-323.3	481.6	472.9	8.77	54.919		
2,500.0	2,490.2	2,430.9	2,402.6	5.7	7.4	145.01	76.5	-339.4	506.7	497.5	9.15	55.392		
2,600.0	2,589.8	2,527.7	2,497.9	5.9	7.7	145.20	82.3	-355.6	531.7	522.2	9.52	55.827		
2,700.0	2,689.3	2,624.5	2,593.2	6.2	8.0	145.37	88.1	-371.7	556.7	546.8	9.90	56.228		
2,800.0	2,788.9	2,721.3	2,688.4	6.4	8.4	145.53	93.9	-387.8	581.7	571.5	10.28	56.599		
2,900.0	2,888.4	2,818.1	2,783.7	6.7	8.7	145.67	99.7	-403.9	606.8	596.1	10.66	56.943		
3,000.0	2,987.9	2,914.9	2,879.0	6.9	9.1	145.80	105.5	-420.1	631.8	620.8	11.03	57.263		
3,100.0	3,087.5	3,011.7	2,974.3	7.1	9.4	145.93	111.3	-436.2	656.9	645.5	11.41	57.561		
3,200.0	3,187.0	3,108.5	3,069.5	7.4	9.8	146.04	117.1	-452.3	681.9	670.1	11.79	57.840		
3,300.0	3,286.6	3,205.3	3,164.8	7.6	10.1	146.14	122.9	-468.4	707.0	694.8	12.17	58.101		
3,400.0	3,386.1	3,302.1	3,260.1	7.9	10.5	146.24	128.7	-484.6	732.0	719.5	12.55	58.346		
3,500.0	3,485.6	3,399.0	3,355.4	8.1	10.8	146.33	134.5	-500.7	757.1	744.1	12.92	58.576		
3,600.0	3,585.2	3,495.8	3,450.6	8.4	11.2	146.42	140.3	-516.8	782.1	768.8	13.30	58.793		
3,700.0	3,684.7	3,592.6	3,545.9	8.6	11.5	146.50	146.1	-533.0	807.2	793.5	13.68	58.998		
3,800.0	3,784.3	3,689.4	3,641.2	8.8	11.9	146.57	151.9	-549.1	832.2	818.2	14.06	59.191		
3,900.0	3,883.8	3,786.2	3,736.5	9.1	12.2	146.64	157.8	-565.2	857.3	842.8	14.44	59.374		
4,000.0	3,983.3	3,883.0	3,831.7	9.3	12.5	146.71	163.6	-581.3	882.3	867.5	14.82	59.548		
4,100.0	4,082.9	3,979.8	3,927.0	9.6	12.9	146.77	169.4	-597.5	907.4	892.2	15.20	59.712		
4,200.0	4,182.4	4,076.6	4,022.3	9.8	13.2	146.83	175.2	-613.6	932.5	916.9	15.57	59.869		
4,300.0	4,281.9	4,173.4	4,117.6	10.0	13.6	146.89	181.0	-629.7	957.5	941.6	15.95	60.018		
4,400.0	4,381.5	4,270.2	4,212.8	10.3	13.9	146.94	186.8	-645.9	982.6	966.2	16.33	60.160		
4,500.0	4,481.0	4,367.0	4,308.1	10.5	14.3	147.00	192.6	-662.0	1,007.6	990.9	16.71	60.295		
4,600.0	4,580.6	4,463.8	4,403.4	10.8	14.6	147.04	198.4	-678.1	1,032.7	1,015.6	17.09	60.425		
4,700.0	4,680.1	4,560.6	4,498.7	11.0	15.0	147.09	204.2	-694.2	1,057.8	1,040.3	17.47	60.548		
4,800.0	4,779.6	4,657.4	4,593.9	11.3	15.3	147.14	210.0	-710.4	1,082.8	1,065.0	17.85	60.667		
4,900.0	4,879.2	4,754.2	4,689.2	11.5	15.7	147.18	215.8	-726.5	1,107.9	1,089.7	18.23	60.780		
5,000.0	4,978.7	4,851.0	4,784.5	11.7	16.0	147.22	221.6	-742.6	1,133.0	1,114.3	18.61	60.888		

CC - Min centre to center distance or convergent 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 6-19D
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 6-19D	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 6-37D - DD - Plan #2		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
5,100.0	5,078.3	4,947.8	4,879.8	12.0	16.4	147.26	227.4	-758.7	1,158.0	1,139.0	18.99	60.993					
5,200.0	5,177.8	5,044.6	4,975.0	12.2	16.7	147.29	233.2	-774.9	1,183.1	1,163.7	19.37	61.093					
5,300.0	5,277.3	5,141.4	5,070.3	12.5	17.1	147.33	239.0	-791.0	1,208.2	1,188.4	19.74	61.189					

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-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	299.9	299.8	0.5	0.5	66.61	-23.0	-19.5	29.4	28.4	0.98	30.109			
348.2	348.1	347.8	347.7	0.6	0.6	74.41	-21.8	-21.1	29.1	28.0	1.16	25.072 CC, ES			
400.0	399.8	399.0	398.9	0.7	0.7	85.99	-20.0	-23.7	29.8	28.4	1.36	21.850			
500.0	499.5	496.9	496.4	0.9	0.9	111.57	-15.1	-30.6	36.9	35.1	1.75	21.054 SF			
600.0	599.0	593.4	592.2	1.1	1.2	129.08	-8.4	-40.0	52.6	50.5	2.10	25.025			
700.0	698.5	688.5	686.1	1.4	1.5	138.57	0.1	-51.9	74.1	71.7	2.44	30.416			
800.0	798.1	783.9	779.9	1.6	1.8	143.93	10.0	-65.9	99.4	96.6	2.77	35.834			
900.0	897.6	880.2	874.7	1.8	2.1	147.16	20.3	-80.3	125.4	122.3	3.12	40.243			
1,000.0	997.2	976.6	969.4	2.1	2.5	149.27	30.5	-94.6	151.7	148.2	3.46	43.805			
1,100.0	1,096.7	1,072.9	1,064.1	2.3	2.8	150.76	40.7	-109.0	178.1	174.3	3.81	46.724			
1,200.0	1,196.2	1,169.3	1,158.9	2.6	3.1	151.87	50.9	-123.3	204.6	200.5	4.16	49.153			
1,300.0	1,295.8	1,265.7	1,253.6	2.8	3.5	152.72	61.2	-137.7	231.2	226.7	4.52	51.202			
1,400.0	1,395.3	1,362.0	1,348.3	3.0	3.8	153.39	71.4	-152.1	257.8	252.9	4.87	52.951			
1,500.0	1,494.9	1,458.4	1,443.1	3.3	4.2	153.94	81.6	-166.4	284.4	279.2	5.22	54.461			
1,600.0	1,594.4	1,554.7	1,537.8	3.5	4.5	154.40	91.8	-180.8	311.1	305.5	5.58	55.777			
1,700.0	1,693.9	1,651.1	1,632.5	3.8	4.9	154.78	102.1	-195.2	337.7	331.8	5.93	56.933			
1,800.0	1,793.5	1,747.4	1,727.2	4.0	5.2	155.11	112.3	-209.5	364.4	358.1	6.29	57.957			
1,900.0	1,893.0	1,843.8	1,822.0	4.2	5.6	155.39	122.5	-223.9	391.1	384.5	6.64	58.869			
2,000.0	1,992.5	1,940.2	1,916.7	4.5	6.0	155.64	132.8	-238.3	417.8	410.8	7.00	59.688			
2,100.0	2,092.1	2,036.5	2,011.4	4.7	6.3	155.86	143.0	-252.6	444.5	437.1	7.36	60.426			
2,200.0	2,191.6	2,132.9	2,106.2	5.0	6.7	156.05	153.2	-267.0	471.2	463.5	7.71	61.096			
2,300.0	2,291.2	2,229.2	2,200.9	5.2	7.0	156.22	163.4	-281.3	497.9	489.8	8.07	61.705			
2,400.0	2,390.7	2,325.6	2,295.6	5.5	7.4	156.38	173.7	-295.7	524.6	516.2	8.43	62.262			
2,500.0	2,490.2	2,421.9	2,390.4	5.7	7.7	156.52	183.9	-310.1	551.3	542.6	8.78	62.773			
2,600.0	2,589.8	2,518.3	2,485.1	5.9	8.1	156.64	194.1	-324.4	578.1	568.9	9.14	63.244			
2,700.0	2,689.3	2,614.7	2,579.8	6.2	8.4	156.76	204.3	-338.8	604.8	595.3	9.50	63.679			
2,800.0	2,788.9	2,711.0	2,674.5	6.4	8.8	156.86	214.6	-353.2	631.5	621.7	9.85	64.082			
2,900.0	2,888.4	2,807.4	2,769.3	6.7	9.1	156.96	224.8	-367.5	658.2	648.0	10.21	64.456			
3,000.0	2,987.9	2,903.7	2,864.0	6.9	9.5	157.05	235.0	-381.9	685.0	674.4	10.57	64.805			
3,100.0	3,087.5	3,000.1	2,958.7	7.1	9.8	157.13	245.3	-396.2	711.7	700.8	10.93	65.131			
3,200.0	3,187.0	3,096.4	3,053.5	7.4	10.2	157.21	255.5	-410.6	738.4	727.1	11.28	65.436			
3,300.0	3,286.6	3,192.8	3,148.2	7.6	10.5	157.28	265.7	-425.0	765.1	753.5	11.64	65.722			
3,400.0	3,386.1	3,289.2	3,242.9	7.9	10.9	157.35	275.9	-439.3	791.9	779.9	12.00	65.991			
3,500.0	3,485.6	3,385.5	3,337.7	8.1	11.2	157.41	286.2	-453.7	818.6	806.3	12.36	66.244			
3,600.0	3,585.2	3,481.9	3,432.4	8.4	11.6	157.47	296.4	-468.1	845.3	832.6	12.72	66.482			
3,700.0	3,684.7	3,578.2	3,527.1	8.6	11.9	157.52	306.6	-482.4	872.1	859.0	13.07	66.708			
3,800.0	3,784.3	3,674.6	3,621.8	8.8	12.3	157.57	316.8	-496.8	898.8	885.4	13.43	66.921			
3,900.0	3,883.8	3,770.9	3,716.6	9.1	12.7	157.62	327.1	-511.2	925.5	911.8	13.79	67.123			
4,000.0	3,983.3	3,867.3	3,811.3	9.3	13.0	157.67	337.3	-525.5	952.3	938.1	14.15	67.315			
4,100.0	4,082.9	3,963.6	3,906.0	9.6	13.4	157.71	347.5	-539.9	979.0	964.5	14.50	67.498			
4,200.0	4,182.4	4,060.0	4,000.8	9.8	13.7	157.75	357.7	-554.2	1,005.8	990.9	14.86	67.671			
4,300.0	4,281.9	4,156.4	4,095.5	10.0	14.1	157.79	368.0	-568.6	1,032.5	1,017.3	15.22	67.836			
4,400.0	4,381.5	4,252.7	4,190.2	10.3	14.4	157.83	378.2	-583.0	1,059.2	1,043.7	15.58	67.994			
4,500.0	4,481.0	4,349.1	4,285.0	10.5	14.8	157.86	388.4	-597.3	1,086.0	1,070.0	15.94	68.144			
4,600.0	4,580.6	4,445.4	4,379.7	10.8	15.1	157.90	398.7	-611.7	1,112.7	1,096.4	16.29	68.288			
4,700.0	4,680.1	4,541.8	4,474.4	11.0	15.5	157.93	408.9	-626.1	1,139.5	1,122.8	16.65	68.426			
4,800.0	4,779.6	4,638.1	4,569.1	11.3	15.8	157.96	419.1	-640.4	1,166.2	1,149.2	17.01	68.557			
4,900.0	4,879.2	4,734.5	4,663.9	11.5	16.2	157.99	429.3	-654.8	1,192.9	1,175.6	17.37	68.683			
5,000.0	4,978.7	4,830.9	4,758.6	11.7	16.5	158.01	439.6	-669.1	1,219.7	1,201.9	17.73	68.805			

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

Cathedral Energy Services

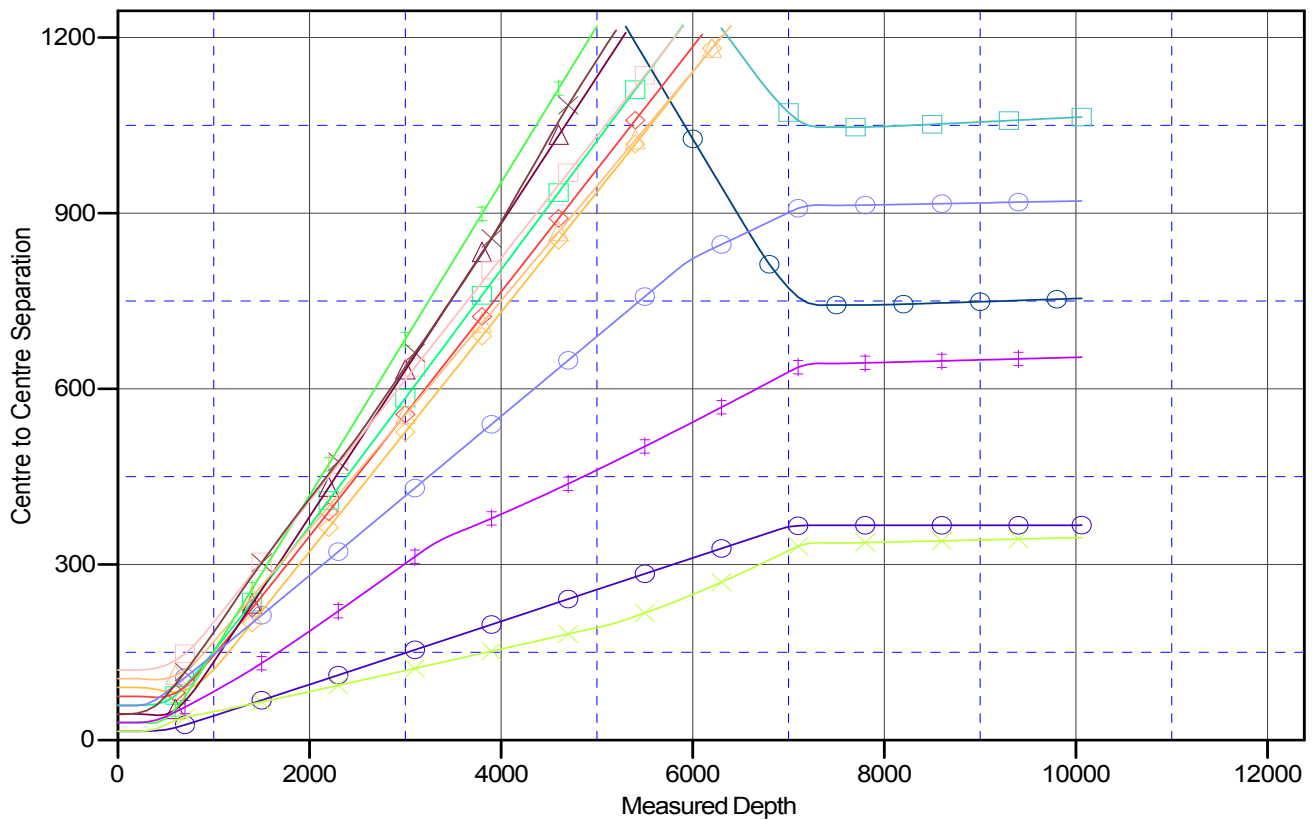
Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-19D
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 6-19D	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 6-19D
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.67°

Ladder Plot



LEGEND

Chevron 6-17D (O06 Pad), DD, Plan #1 V0	Chevron 6-21D, DD, Plan #2 V0	Chevron 6-32D, DD, Plan #2 V0
Chevron 6-18D (O06 Pad), DD, Plan #1 V0	Chevron 6-37D, DD, Plan #2 V0	Chevron 6-22D, DD, Plan #3 V0
Chevron 6-34D, DD, Plan #2 V0	Chevron 6-20D, DD, Plan #2 V0	Chevron 6-23D, DD, Plan #2 V0
Chevron 6-36D, DD, Plan #2 V0	Chevron 6-33D, DD, Plan #2 V0	Chevron 6-25D, DD, DD V0
Chevron 6-35D, DD, Plan #2 V0	Chevron 6-38D, DD, Plan #2 V0	