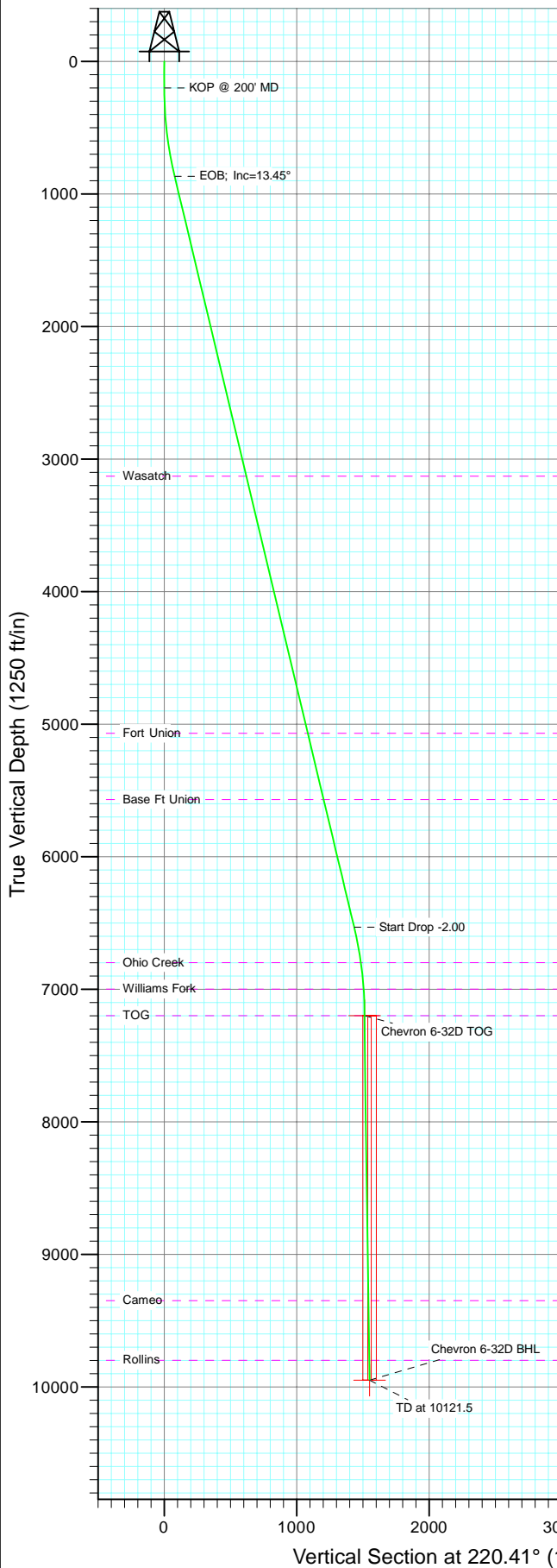
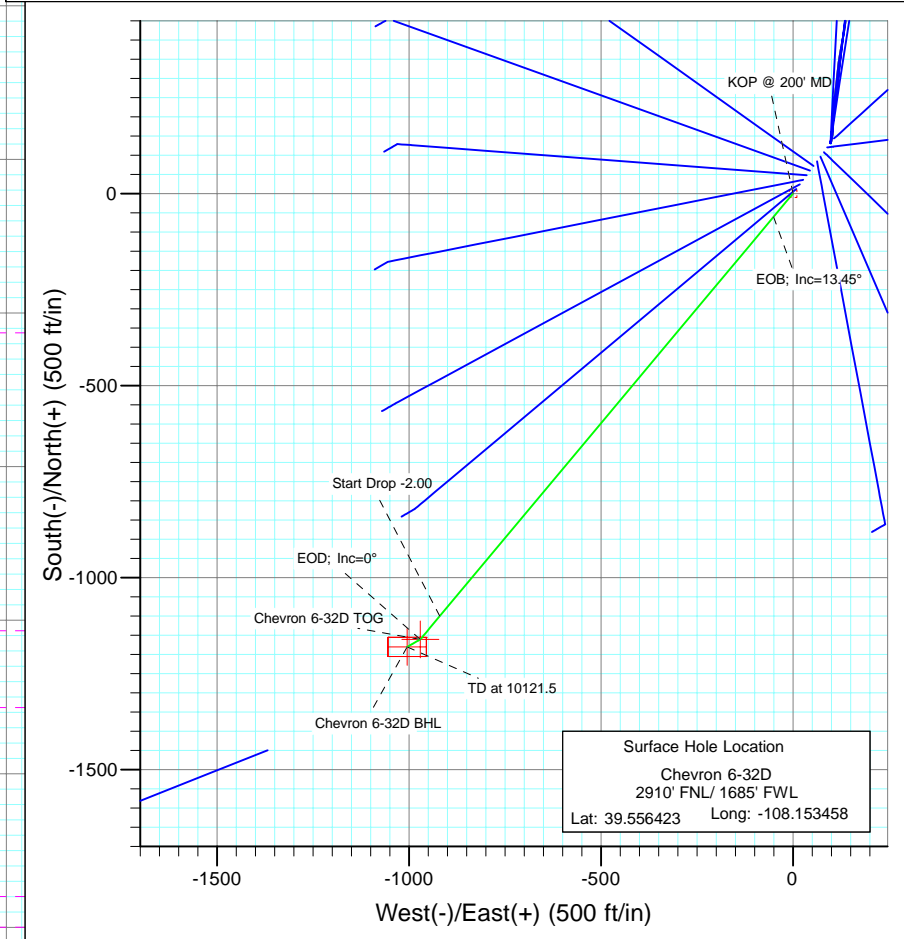




Project: Garfield County
Site: Sec 6 T6S R96W (F06 696)
Well: Chevron 6-32D
Wellbore: DD
Design: Plan #2



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	872.7	13.45	219.90	866.5	-60.3	-50.4	2.00	219.90	78.6	
4	6698.5	13.45	219.90	6532.5	-1100.2	-919.8	0.00	0.00	1434.0	
5	7371.2	0.00	0.00	7199.0	-1160.5	-970.3	2.00	180.00	1512.6	Chevron 6-32D TOG
6	7728.1	0.89	240.05	7555.9	-1161.9	-972.7	0.25	240.05	1515.2	
7	10121.5	0.89	240.05	9949.0	-1180.5	-1004.9	0.00	0.00	1550.3	Chevron 6-32D BHL



Surface Hole Location
Chevron 6-32D
2910' FNL/ 1685' FWL
Lat: 39.556423 Long: -108.153458

Bottom Hole Location
Chevron 6-32D
4089' FNL/ 680' FWL
Lat : 39.553182
Long. : -108.157022

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3129.0	3199.0	Wasatch
5069.0	5193.7	Fort Union
5569.0	5707.8	Base Ft Union
6799.0	6969.9	Ohio Creek
6999.0	7171.0	Williams Fork
7199.0	7371.2	TOG
9349.0	9521.4	Cameo
9799.0	9971.5	Rollins

DESIGN DETAILS: Plan #2
95XXX; BH
KBE @ 8244.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From TVD
Chevron 6-32D BHL	220.41	Slot	0.0	0.0	0.0

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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 6-32D					
Well Position	+N/-S	0.0 ft	Northing:	1,638,484.26 ft	Latitude:	39.556423
	+E/-W	0.0 ft	Easting:	2,251,946.61 ft	Longitude:	-108.153458
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	220.41	

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	
872.7	13.45	219.90	866.5	-60.3	-50.4	2.00	2.00	0.00	219.90	
6,698.5	13.45	219.90	6,532.5	-1,100.2	-919.8	0.00	0.00	0.00	0.00	
7,371.2	0.00	0.00	7,199.0	-1,160.5	-970.3	2.00	-2.00	0.00	180.00	Chevron 6-32D TOG
7,728.1	0.89	240.05	7,555.9	-1,161.9	-972.7	0.25	0.25	-33.61	240.05	
10,121.5	0.89	240.05	9,949.0	-1,180.5	-1,004.9	0.00	0.00	0.00	0.00	Chevron 6-32D BHL

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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	219.90	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	219.90	240.0	-0.2	-0.2	0.3	2.00	2.00	
270.0	1.40	219.90	270.0	-0.7	-0.5	0.9	2.00	2.00	
300.0	2.00	219.90	300.0	-1.3	-1.1	1.7	2.00	2.00	
330.0	2.60	219.90	330.0	-2.3	-1.9	2.9	2.00	2.00	
360.0	3.20	219.90	359.9	-3.4	-2.9	4.5	2.00	2.00	
390.0	3.80	219.90	389.9	-4.8	-4.0	6.3	2.00	2.00	
420.0	4.40	219.90	419.8	-6.5	-5.4	8.4	2.00	2.00	
450.0	5.00	219.90	449.7	-8.4	-7.0	10.9	2.00	2.00	
480.0	5.60	219.90	479.6	-10.5	-8.8	13.7	2.00	2.00	
510.0	6.20	219.90	509.4	-12.9	-10.7	16.8	2.00	2.00	
540.0	6.80	219.90	539.2	-15.5	-12.9	20.2	2.00	2.00	
570.0	7.40	219.90	569.0	-18.3	-15.3	23.9	2.00	2.00	
600.0	8.00	219.90	598.7	-21.4	-17.9	27.9	2.00	2.00	
630.0	8.60	219.90	628.4	-24.7	-20.7	32.2	2.00	2.00	
660.0	9.20	219.90	658.0	-28.3	-23.6	36.9	2.00	2.00	
690.0	9.80	219.90	687.6	-32.1	-26.8	41.8	2.00	2.00	
720.0	10.40	219.90	717.1	-36.1	-30.2	47.1	2.00	2.00	
750.0	11.00	219.90	746.6	-40.4	-33.8	52.6	2.00	2.00	
780.0	11.60	219.90	776.0	-44.9	-37.5	58.5	2.00	2.00	
810.0	12.20	219.90	805.4	-49.6	-41.5	64.7	2.00	2.00	
840.0	12.80	219.90	834.7	-54.6	-45.7	71.2	2.00	2.00	
870.0	13.40	219.90	863.9	-59.8	-50.0	78.0	2.00	2.00	
872.7	13.45	219.90	866.5	-60.3	-50.4	78.6	2.00	2.00	EOB; Inc=13.45°
900.0	13.45	219.90	893.1	-65.2	-54.5	85.0	0.00	0.00	
930.0	13.45	219.90	922.3	-70.5	-59.0	91.9	0.00	0.00	
960.0	13.45	219.90	951.4	-75.9	-63.5	98.9	0.00	0.00	
990.0	13.45	219.90	980.6	-81.3	-67.9	105.9	0.00	0.00	
1,020.0	13.45	219.90	1,009.8	-86.6	-72.4	112.9	0.00	0.00	
1,050.0	13.45	219.90	1,039.0	-92.0	-76.9	119.9	0.00	0.00	
1,080.0	13.45	219.90	1,068.1	-97.3	-81.4	126.8	0.00	0.00	
1,110.0	13.45	219.90	1,097.3	-102.7	-85.8	133.8	0.00	0.00	
1,140.0	13.45	219.90	1,126.5	-108.0	-90.3	140.8	0.00	0.00	
1,170.0	13.45	219.90	1,155.7	-113.4	-94.8	147.8	0.00	0.00	
1,200.0	13.45	219.90	1,184.9	-118.7	-99.3	154.8	0.00	0.00	
1,230.0	13.45	219.90	1,214.0	-124.1	-103.7	161.7	0.00	0.00	
1,260.0	13.45	219.90	1,243.2	-129.4	-108.2	168.7	0.00	0.00	
1,290.0	13.45	219.90	1,272.4	-134.8	-112.7	175.7	0.00	0.00	
1,320.0	13.45	219.90	1,301.6	-140.2	-117.2	182.7	0.00	0.00	
1,350.0	13.45	219.90	1,330.7	-145.5	-121.7	189.7	0.00	0.00	
1,380.0	13.45	219.90	1,359.9	-150.9	-126.1	196.6	0.00	0.00	
1,410.0	13.45	219.90	1,389.1	-156.2	-130.6	203.6	0.00	0.00	
1,440.0	13.45	219.90	1,418.3	-161.6	-135.1	210.6	0.00	0.00	
1,470.0	13.45	219.90	1,447.4	-166.9	-139.6	217.6	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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	13.45	219.90	1,476.6	-172.3	-144.0	224.6	0.00	0.00	
1,530.0	13.45	219.90	1,505.8	-177.6	-148.5	231.5	0.00	0.00	
1,560.0	13.45	219.90	1,535.0	-183.0	-153.0	238.5	0.00	0.00	
1,590.0	13.45	219.90	1,564.2	-188.3	-157.5	245.5	0.00	0.00	
1,620.0	13.45	219.90	1,593.3	-193.7	-161.9	252.5	0.00	0.00	
1,650.0	13.45	219.90	1,622.5	-199.1	-166.4	259.5	0.00	0.00	
1,680.0	13.45	219.90	1,651.7	-204.4	-170.9	266.4	0.00	0.00	
1,710.0	13.45	219.90	1,680.9	-209.8	-175.4	273.4	0.00	0.00	
1,740.0	13.45	219.90	1,710.0	-215.1	-179.9	280.4	0.00	0.00	
1,770.0	13.45	219.90	1,739.2	-220.5	-184.3	287.4	0.00	0.00	
1,800.0	13.45	219.90	1,768.4	-225.8	-188.8	294.4	0.00	0.00	
1,830.0	13.45	219.90	1,797.6	-231.2	-193.3	301.3	0.00	0.00	
1,860.0	13.45	219.90	1,826.7	-236.5	-197.8	308.3	0.00	0.00	
1,890.0	13.45	219.90	1,855.9	-241.9	-202.2	315.3	0.00	0.00	
1,920.0	13.45	219.90	1,885.1	-247.3	-206.7	322.3	0.00	0.00	
1,950.0	13.45	219.90	1,914.3	-252.6	-211.2	329.2	0.00	0.00	
1,980.0	13.45	219.90	1,943.4	-258.0	-215.7	336.2	0.00	0.00	
2,010.0	13.45	219.90	1,972.6	-263.3	-220.1	343.2	0.00	0.00	
2,040.0	13.45	219.90	2,001.8	-268.7	-224.6	350.2	0.00	0.00	
2,070.0	13.45	219.90	2,031.0	-274.0	-229.1	357.2	0.00	0.00	
2,100.0	13.45	219.90	2,060.2	-279.4	-233.6	364.1	0.00	0.00	
2,130.0	13.45	219.90	2,089.3	-284.7	-238.1	371.1	0.00	0.00	
2,160.0	13.45	219.90	2,118.5	-290.1	-242.5	378.1	0.00	0.00	
2,190.0	13.45	219.90	2,147.7	-295.4	-247.0	385.1	0.00	0.00	
2,220.0	13.45	219.90	2,176.9	-300.8	-251.5	392.1	0.00	0.00	
2,250.0	13.45	219.90	2,206.0	-306.2	-256.0	399.0	0.00	0.00	
2,280.0	13.45	219.90	2,235.2	-311.5	-260.4	406.0	0.00	0.00	
2,310.0	13.45	219.90	2,264.4	-316.9	-264.9	413.0	0.00	0.00	
2,340.0	13.45	219.90	2,293.6	-322.2	-269.4	420.0	0.00	0.00	
2,370.0	13.45	219.90	2,322.7	-327.6	-273.9	427.0	0.00	0.00	
2,400.0	13.45	219.90	2,351.9	-332.9	-278.3	433.9	0.00	0.00	
2,430.0	13.45	219.90	2,381.1	-338.3	-282.8	440.9	0.00	0.00	
2,460.0	13.45	219.90	2,410.3	-343.6	-287.3	447.9	0.00	0.00	
2,490.0	13.45	219.90	2,439.5	-349.0	-291.8	454.9	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 6-32D TOG	0.00	0.00	7,199.0	-1,160.5	-970.3	1,637,352.59	2,250,942.89	39.553237	-108.156899
- plan misses target center by 4875.7ft at 2490.0ft MD (2439.5 TVD, -349.0 N, -291.8 E)									
- Point									
Chevron 6-32D BHL	0.00	0.00	9,949.0	-1,180.5	-1,004.9	1,637,333.61	2,250,907.62	39.553182	-108.157022
- plan misses target center by 7589.0ft at 2490.0ft MD (2439.5 TVD, -349.0 N, -291.8 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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	13.45	219.90	2,449.2	-350.8	-293.3	457.2	0.00	0.00	
2,600.0	13.45	219.90	2,546.4	-368.6	-308.2	480.5	0.00	0.00	
2,700.0	13.45	219.90	2,643.7	-386.5	-323.1	503.7	0.00	0.00	
2,800.0	13.45	219.90	2,740.9	-404.3	-338.0	527.0	0.00	0.00	
2,900.0	13.45	219.90	2,838.2	-422.2	-353.0	550.3	0.00	0.00	
3,000.0	13.45	219.90	2,935.5	-440.0	-367.9	573.5	0.00	0.00	
3,100.0	13.45	219.90	3,032.7	-457.9	-382.8	596.8	0.00	0.00	
3,199.0	13.45	219.90	3,129.0	-475.5	-397.6	619.8	0.00	0.00	Wasatch
3,200.0	13.45	219.90	3,130.0	-475.7	-397.7	620.1	0.00	0.00	
3,300.0	13.45	219.90	3,227.2	-493.6	-412.7	643.3	0.00	0.00	
3,400.0	13.45	219.90	3,324.5	-511.4	-427.6	666.6	0.00	0.00	
3,500.0	13.45	219.90	3,421.7	-529.3	-442.5	689.9	0.00	0.00	
3,600.0	13.45	219.90	3,519.0	-547.1	-457.4	713.1	0.00	0.00	
3,700.0	13.45	219.90	3,616.2	-565.0	-472.4	736.4	0.00	0.00	
3,800.0	13.45	219.90	3,713.5	-582.8	-487.3	759.7	0.00	0.00	
3,900.0	13.45	219.90	3,810.8	-600.7	-502.2	782.9	0.00	0.00	
4,000.0	13.45	219.90	3,908.0	-618.5	-517.1	806.2	0.00	0.00	
4,100.0	13.45	219.90	4,005.3	-636.4	-532.0	829.4	0.00	0.00	
4,200.0	13.45	219.90	4,102.5	-654.2	-547.0	852.7	0.00	0.00	
4,300.0	13.45	219.90	4,199.8	-672.1	-561.9	876.0	0.00	0.00	
4,400.0	13.45	219.90	4,297.0	-689.9	-576.8	899.2	0.00	0.00	
4,500.0	13.45	219.90	4,394.3	-707.8	-591.7	922.5	0.00	0.00	
4,600.0	13.45	219.90	4,491.6	-725.6	-606.7	945.8	0.00	0.00	
4,700.0	13.45	219.90	4,588.8	-743.5	-621.6	969.0	0.00	0.00	
4,800.0	13.45	219.90	4,686.1	-761.3	-636.5	992.3	0.00	0.00	
4,900.0	13.45	219.90	4,783.3	-779.2	-651.4	1,015.6	0.00	0.00	
5,000.0	13.45	219.90	4,880.6	-797.0	-666.4	1,038.8	0.00	0.00	
5,100.0	13.45	219.90	4,977.8	-814.9	-681.3	1,062.1	0.00	0.00	
5,193.7	13.45	219.90	5,069.0	-831.6	-695.3	1,083.9	0.00	0.00	Fort Union
5,200.0	13.45	219.90	5,075.1	-832.7	-696.2	1,085.4	0.00	0.00	
5,300.0	13.45	219.90	5,172.3	-850.6	-711.1	1,108.6	0.00	0.00	
5,400.0	13.45	219.90	5,269.6	-868.4	-726.0	1,131.9	0.00	0.00	
5,500.0	13.45	219.90	5,366.9	-886.3	-741.0	1,155.2	0.00	0.00	
5,600.0	13.45	219.90	5,464.1	-904.1	-755.9	1,178.4	0.00	0.00	
5,700.0	13.45	219.90	5,561.4	-922.0	-770.8	1,201.7	0.00	0.00	
5,707.8	13.45	219.90	5,569.0	-923.4	-772.0	1,203.5	0.00	0.00	Base Ft Union
5,800.0	13.45	219.90	5,658.6	-939.8	-785.7	1,225.0	0.00	0.00	
5,900.0	13.45	219.90	5,755.9	-957.7	-800.7	1,248.2	0.00	0.00	
6,000.0	13.45	219.90	5,853.1	-975.5	-815.6	1,271.5	0.00	0.00	
6,100.0	13.45	219.90	5,950.4	-993.4	-830.5	1,294.7	0.00	0.00	
6,200.0	13.45	219.90	6,047.6	-1,011.2	-845.4	1,318.0	0.00	0.00	
6,300.0	13.45	219.90	6,144.9	-1,029.1	-860.4	1,341.3	0.00	0.00	
6,400.0	13.45	219.90	6,242.2	-1,046.9	-875.3	1,364.5	0.00	0.00	
6,500.0	13.45	219.90	6,339.4	-1,064.8	-890.2	1,387.8	0.00	0.00	
6,600.0	13.45	219.90	6,436.7	-1,082.6	-905.1	1,411.1	0.00	0.00	
6,698.5	13.45	219.90	6,532.5	-1,100.2	-919.8	1,434.0	0.00	0.00	Start Drop -2.00
6,700.0	13.42	219.90	6,533.9	-1,100.5	-920.0	1,434.3	2.00	-2.00	
6,800.0	11.42	219.90	6,631.6	-1,117.0	-933.8	1,455.8	2.00	-2.00	
6,900.0	9.42	219.90	6,729.9	-1,130.8	-945.5	1,473.9	2.00	-2.00	
6,969.9	8.03	219.90	6,799.0	-1,139.0	-952.3	1,484.5	2.00	-2.00	Ohio Creek
7,000.0	7.42	219.90	6,828.8	-1,142.1	-954.8	1,488.6	2.00	-2.00	
7,100.0	5.42	219.90	6,928.2	-1,150.7	-962.0	1,499.8	2.00	-2.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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
7,171.0	4.00	219.90	6,999.0	-1,155.1	-965.8	1,505.6	2.00	-2.00	Williams Fork
7,200.0	3.42	219.90	7,027.9	-1,156.6	-967.0	1,507.5	2.00	-2.00	
7,300.0	1.42	219.90	7,127.8	-1,159.8	-969.7	1,511.7	2.00	-2.00	
7,371.2	0.00	0.00	7,199.0	-1,160.5	-970.3	1,512.6	2.00	-2.00	EOD; Inc=0° - TOG - Chevron 6-32D TOG
7,400.0	0.07	240.05	7,227.8	-1,160.5	-970.3	1,512.6	0.25	0.25	
7,500.0	0.32	240.05	7,327.8	-1,160.7	-970.6	1,512.9	0.25	0.25	
7,600.0	0.57	240.05	7,427.8	-1,161.1	-971.2	1,513.7	0.25	0.25	
7,700.0	0.82	240.05	7,527.8	-1,161.7	-972.3	1,514.8	0.25	0.25	
7,728.1	0.89	240.05	7,555.9	-1,161.9	-972.7	1,515.2	0.25	0.25	
7,800.0	0.89	240.05	7,627.8	-1,162.4	-973.6	1,516.3	0.00	0.00	
7,900.0	0.89	240.05	7,727.8	-1,163.2	-975.0	1,517.7	0.00	0.00	
8,000.0	0.89	240.05	7,827.8	-1,164.0	-976.3	1,519.2	0.00	0.00	
8,100.0	0.89	240.05	7,927.7	-1,164.8	-977.7	1,520.7	0.00	0.00	
8,200.0	0.89	240.05	8,027.7	-1,165.6	-979.0	1,522.1	0.00	0.00	
8,300.0	0.89	240.05	8,127.7	-1,166.3	-980.4	1,523.6	0.00	0.00	
8,400.0	0.89	240.05	8,227.7	-1,167.1	-981.7	1,525.1	0.00	0.00	
8,500.0	0.89	240.05	8,327.7	-1,167.9	-983.1	1,526.5	0.00	0.00	
8,600.0	0.89	240.05	8,427.7	-1,168.7	-984.4	1,528.0	0.00	0.00	
8,700.0	0.89	240.05	8,527.7	-1,169.4	-985.8	1,529.5	0.00	0.00	
8,800.0	0.89	240.05	8,627.7	-1,170.2	-987.1	1,530.9	0.00	0.00	
8,900.0	0.89	240.05	8,727.6	-1,171.0	-988.5	1,532.4	0.00	0.00	
9,000.0	0.89	240.05	8,827.6	-1,171.8	-989.8	1,533.9	0.00	0.00	
9,100.0	0.89	240.05	8,927.6	-1,172.6	-991.2	1,535.3	0.00	0.00	
9,200.0	0.89	240.05	9,027.6	-1,173.3	-992.5	1,536.8	0.00	0.00	
9,300.0	0.89	240.05	9,127.6	-1,174.1	-993.9	1,538.3	0.00	0.00	
9,400.0	0.89	240.05	9,227.6	-1,174.9	-995.2	1,539.7	0.00	0.00	
9,500.0	0.89	240.05	9,327.6	-1,175.7	-996.6	1,541.2	0.00	0.00	
9,521.4	0.89	240.05	9,349.0	-1,175.8	-996.9	1,541.5	0.00	0.00	Cameo
9,600.0	0.89	240.05	9,427.6	-1,176.4	-997.9	1,542.7	0.00	0.00	
9,700.0	0.89	240.05	9,527.5	-1,177.2	-999.3	1,544.1	0.00	0.00	
9,800.0	0.89	240.05	9,627.5	-1,178.0	-1,000.6	1,545.6	0.00	0.00	
9,900.0	0.89	240.05	9,727.5	-1,178.8	-1,002.0	1,547.1	0.00	0.00	
9,971.5	0.89	240.05	9,799.0	-1,179.3	-1,002.9	1,548.1	0.00	0.00	Rollins
10,000.0	0.89	240.05	9,827.5	-1,179.6	-1,003.3	1,548.5	0.00	0.00	
10,100.0	0.89	240.05	9,927.5	-1,180.3	-1,004.7	1,550.0	0.00	0.00	
10,121.5	0.89	240.05	9,949.0	-1,180.5	-1,004.9	1,550.3	0.00	0.00	TD at 10121.5 - Chevron 6-32D BHL

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 6-32D TOG	0.00	0.00	7,199.0	-1,160.5	-970.3	1,637,352.59	2,250,942.89	39.553237	-108.156899
- plan hits target center									
- Point									
Chevron 6-32D BHL	0.00	0.00	9,949.0	-1,180.5	-1,004.9	1,637,333.61	2,250,907.62	39.553182	-108.157022
- plan hits target center									
- Rectangle (sides W50.0 H100.0 D0.0)									

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,199.0	3,129.0	Wasatch		0.00		
5,193.7	5,069.0	Fort Union		0.00		
5,707.8	5,569.0	Base Ft Union		0.00		
6,969.9	6,799.0	Ohio Creek		0.00		
7,171.0	6,999.0	Williams Fork		0.00		
7,371.2	7,199.0	TOG		0.00		
9,521.4	9,349.0	Cameo		0.00		
9,971.5	9,799.0	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	
872.7	866.5	-60.3	-50.4	EOB; Inc=13.45°	
6,698.5	6,532.5	-1,100.2	-919.8	Start Drop -2.00	
7,371.2	7,199.0	-1,160.5	-970.3	EOD; Inc=0°	
10,121.5	9,949.0	-1,161.9	-972.7	TD at 10121.5	

Berry Petroleum Company (NAD 83)

Garfield County

Sec 6 T6S R96W (F06 696)

Chevron 6-32D

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 6-32D
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 6-32D	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	10,121.5	Plan #2 (DD)	MWD	Geolink MWD	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
NESE Sec 1-T6S-R97W						
Chevron 6-31D(Berry) - DD - Plan #1	7,715.3	7,822.0	488.7	458.9	16.384	CC, ES, SF
Chevron-Marathon 13A-6D - DD - DD	7,374.8	7,341.6	756.7	727.4	25.807	CC, ES
Chevron-Marathon 13A-6D - DD - DD	10,121.5	10,050.0	797.4	759.1	20.844	SF
Chevron-Marathon 13C-6D - DD - Plan #1						Out of range
Chevron-Marathon 42B-1D - DD - Plan #1						Out of range
Chevron-Marathon 42D-1D - DD - DD	7,279.6	7,237.1	1,133.6	1,096.7	30.733	CC
Chevron-Marathon 42D-1D - DD - DD	8,606.4	8,576.1	1,136.7	1,096.5	28.315	ES
Chevron-Marathon 42D-1D - DD - DD	10,100.0	10,020.0	1,164.8	1,121.5	26.883	SF
Sec 6 T6S R96W (F06 696)						
Chevron 6-19D - DD - Plan #2	200.0	200.0	119.9	119.3	192.971	CC, ES
Chevron 6-19D - DD - Plan #2	5,800.0	5,692.5	1,201.9	1,175.6	45.700	SF
Chevron 6-20D - DD - Plan #2	200.0	200.0	134.9	134.3	217.160	CC, ES
Chevron 6-20D - DD - Plan #2	5,000.0	4,872.8	1,201.0	1,180.4	58.242	SF
Chevron 6-21D - DD - Plan #2	200.0	200.0	104.9	104.2	168.782	CC, ES
Chevron 6-21D - DD - Plan #2	6,900.0	6,808.4	1,218.6	1,179.5	31.099	SF
Chevron 6-22D - DD - Plan #3	200.0	200.0	150.1	149.5	241.549	CC, ES
Chevron 6-22D - DD - Plan #3	1,100.0	1,081.9	282.4	278.7	76.422	SF
Chevron 6-23D - DD - Plan #2	200.0	200.0	178.9	178.3	287.968	CC, ES
Chevron 6-23D - DD - Plan #2	3,900.0	3,733.9	1,207.3	1,194.1	92.045	SF
Chevron 6-25D - DD - DD	0.0	0.0	163.9			
Chevron 6-25D - DD - DD	3,300.0	3,103.4	1,163.7	1,151.7	97.427	SF
Chevron 6-25D - DD - Plan #1	200.0	200.0	163.9	163.3	263.774	CC, ES
Chevron 6-25D - DD - Plan #1	3,500.0	3,300.5	1,190.8	1,178.1	93.206	SF
Chevron 6-25D - DD - Plan #2	200.0	200.0	163.9	163.3	263.774	CC, ES
Chevron 6-25D - DD - Plan #2	800.0	775.6	239.0	236.3	89.962	SF
Chevron 6-25D - DD - Plan #3	200.0	200.0	163.9	163.3	263.774	CC, ES
Chevron 6-25D - DD - Plan #3	3,300.0	3,071.0	1,220.8	1,208.8	101.450	SF
Chevron 6-25D - DD - Plan #4	200.0	200.0	163.9	163.3	263.774	CC, ES
Chevron 6-25D - DD - Plan #4	3,400.0	3,192.9	1,198.3	1,186.0	97.553	SF
Chevron 6-25D - DD - Plan #5	0.0	0.0	163.9			
Chevron 6-25D - DD - Plan #5	3,300.0	3,103.4	1,163.7	1,151.7	97.427	SF
Chevron 6-25D - DD - Plan #6	0.0	0.0	163.9			
Chevron 6-25D - DD - Plan #6	3,300.0	3,103.4	1,163.7	1,151.7	97.427	SF
Chevron 6-33D - DD - Plan #2	200.0	200.0	14.9	14.2	23.920	CC, ES
Chevron 6-33D - DD - Plan #2	10,121.5	10,079.2	339.8	288.6	6.629	SF
Chevron 6-34D - DD - Plan #2	200.0	200.0	29.9	29.3	48.108	CC, ES
Chevron 6-34D - DD - Plan #2	10,121.5	10,065.0	617.7	564.4	11.600	SF
Chevron 6-35D - DD - Plan #2	200.0	200.0	44.9	44.3	72.296	CC, ES
Chevron 6-35D - DD - Plan #2	10,121.5	10,047.0	987.0	934.2	18.696	SF
Chevron 6-36D - DD - Plan #2	200.0	200.0	60.0	59.3	96.486	CC, ES
Chevron 6-36D - DD - Plan #2	6,600.0	6,494.7	1,204.7	1,164.1	29.692	SF
Chevron 6-37D - DD - Plan #2	200.0	200.0	75.0	74.4	120.675	CC, ES
Chevron 6-37D - DD - Plan #2	5,400.0	5,266.5	1,213.6	1,180.9	37.103	SF
Chevron 6-38D - DD - Plan #2	200.0	200.0	89.8	89.2	144.593	CC, ES
Chevron 6-38D - DD - Plan #2	4,500.0	4,339.9	1,199.1	1,173.7	47.058	SF

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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- NESE Sec 1-T6S-R97W - Chevron 6-31D(Berry) - DD - Plan #1													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
5,500.0	5,366.9	5,873.9	5,753.2	22.7	22.4	15.37	-1,581.2	-1,700.7	1,212.7	1,191.1	21.66	55.999		
5,600.0	5,464.1	5,964.3	5,841.3	23.1	22.8	15.41	-1,573.9	-1,682.3	1,170.0	1,148.0	22.03	53.106		
5,700.0	5,561.4	6,054.7	5,929.5	23.6	23.2	15.46	-1,566.6	-1,663.8	1,127.2	1,104.8	22.41	50.310		
5,800.0	5,658.6	6,145.1	6,017.7	24.0	23.6	15.51	-1,559.3	-1,645.4	1,084.5	1,061.7	22.78	47.605		
5,900.0	5,755.9	6,235.5	6,105.9	24.5	24.0	15.56	-1,552.0	-1,626.9	1,041.7	1,018.6	23.16	44.987		
6,000.0	5,853.1	6,325.9	6,194.1	24.9	24.3	15.62	-1,544.7	-1,608.5	999.0	975.5	23.53	42.452		
6,100.0	5,950.4	6,416.3	6,282.3	25.4	24.7	15.68	-1,537.4	-1,590.0	956.3	932.3	23.91	39.995		
6,200.0	6,047.6	6,506.7	6,370.5	25.8	25.1	15.75	-1,530.1	-1,571.6	913.5	889.2	24.29	37.615		
6,300.0	6,144.9	6,597.1	6,458.7	26.3	25.5	15.83	-1,522.8	-1,553.1	870.8	846.1	24.66	35.306		
6,400.0	6,242.2	6,687.5	6,546.9	26.7	25.9	15.92	-1,515.5	-1,534.7	828.0	803.0	25.04	33.066		
6,500.0	6,339.4	6,777.9	6,635.1	27.1	26.3	16.01	-1,508.2	-1,516.2	785.3	759.9	25.42	30.892		
6,600.0	6,436.7	6,868.3	6,723.3	27.6	26.7	16.12	-1,500.9	-1,497.7	742.5	716.7	25.80	28.780		
6,700.0	6,533.9	6,958.7	6,811.5	28.0	27.1	16.23	-1,493.6	-1,479.3	699.8	673.6	26.18	26.727		
6,800.0	6,631.6	7,049.8	6,900.4	28.4	27.4	16.06	-1,486.3	-1,460.7	658.6	632.0	26.67	24.696		
6,900.0	6,729.9	7,142.3	6,990.6	28.8	27.8	15.83	-1,478.8	-1,441.8	620.5	593.4	27.13	22.873		
7,000.0	6,828.8	7,228.0	7,074.3	29.0	28.2	15.55	-1,472.0	-1,424.6	585.9	558.4	27.55	21.268		
7,100.0	6,928.2	7,308.1	7,152.9	29.3	28.5	15.26	-1,466.3	-1,410.3	556.7	528.8	27.93	19.933		
7,200.0	7,027.9	7,390.1	7,233.8	29.4	28.7	14.98	-1,461.4	-1,397.7	533.4	505.1	28.28	18.860		
7,300.0	7,127.8	7,473.7	7,316.6	29.5	28.9	14.69	-1,457.2	-1,387.2	516.2	487.6	28.61	18.042		
7,400.0	7,227.8	7,558.4	7,400.8	29.6	29.1	-5.73	-1,453.9	-1,378.8	505.0	476.1	28.91	17.466		
7,500.0	7,327.8	7,643.6	7,485.8	29.7	29.3	-5.92	-1,451.5	-1,372.7	497.2	467.9	29.21	17.021		
7,600.0	7,427.8	7,729.2	7,571.2	29.8	29.4	-6.05	-1,450.0	-1,368.9	491.8	462.3	29.50	16.670		
7,700.0	7,527.8	7,814.9	7,657.0	29.9	29.5	-6.10	-1,449.4	-1,367.5	488.9	459.1	29.79	16.409		
7,715.3	7,543.1	7,822.0	7,664.0	29.9	29.5	-6.11	-1,449.4	-1,367.5	488.7	458.9	29.83	16.384 CC, ES, SF		
7,800.0	7,627.8	7,822.0	7,664.0	30.0	29.5	-6.11	-1,449.4	-1,367.5	495.9	466.0	29.96	16.552		
7,900.0	7,727.8	7,822.0	7,664.0	30.1	29.5	-6.11	-1,449.4	-1,367.5	522.3	492.2	30.12	17.341		
8,000.0	7,827.8	7,822.0	7,664.0	30.2	29.5	-6.11	-1,449.4	-1,367.5	565.4	535.1	30.28	18.673		
8,100.0	7,927.7	7,822.0	7,664.0	30.3	29.5	-6.11	-1,449.4	-1,367.5	621.7	591.2	30.44	20.426		
8,200.0	8,027.7	7,822.0	7,664.0	30.4	29.5	-6.11	-1,449.4	-1,367.5	688.0	657.4	30.59	22.488		
8,300.0	8,127.7	7,822.0	7,664.0	30.5	29.5	-6.11	-1,449.4	-1,367.5	761.7	730.9	30.75	24.768		
8,400.0	8,227.7	7,822.0	7,664.0	30.6	29.5	-6.11	-1,449.4	-1,367.5	840.8	809.9	30.91	27.201		
8,500.0	8,327.7	7,822.0	7,664.0	30.7	29.5	-6.11	-1,449.4	-1,367.5	924.0	893.0	31.07	29.740		
8,600.0	8,427.7	7,822.0	7,664.0	30.8	29.5	-6.11	-1,449.4	-1,367.5	1,010.3	979.1	31.23	32.349		
8,700.0	8,527.7	7,822.0	7,664.0	30.9	29.5	-6.11	-1,449.4	-1,367.5	1,098.9	1,067.5	31.39	35.006		
8,800.0	8,627.7	7,822.0	7,664.0	31.0	29.5	-6.11	-1,449.4	-1,367.5	1,189.3	1,157.7	31.55	37.694		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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 NESE Sec 1-T6S-R97W - Chevron-Marathon 13A-6D - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 169-													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	5,172.3	5,356.0	5,335.6	21.8	11.8	-7.01	-1,871.8	-1,377.7	1,220.4	1,200.7	19.65	62.114		
5,400.0	5,269.6	5,419.0	5,398.5	22.2	11.9	-7.21	-1,871.8	-1,375.1	1,195.1	1,175.1	19.96	59.869		
5,500.0	5,366.9	5,498.3	5,477.9	22.7	12.0	-7.41	-1,872.8	-1,373.9	1,172.1	1,151.8	20.30	57.728		
5,600.0	5,464.1	5,605.8	5,585.4	23.1	12.2	-7.66	-1,874.1	-1,372.7	1,149.5	1,128.8	20.70	55.526		
5,700.0	5,561.4	5,756.3	5,735.7	23.6	12.5	-8.04	-1,871.8	-1,368.3	1,123.6	1,102.4	21.20	53.009		
5,800.0	5,658.6	5,856.2	5,835.4	24.0	12.7	-8.39	-1,869.0	-1,362.9	1,095.4	1,073.8	21.62	50.677		
5,900.0	5,755.9	5,952.5	5,931.5	24.5	12.9	-8.82	-1,866.9	-1,356.3	1,067.1	1,045.1	22.06	48.382		
6,000.0	5,853.1	6,047.2	6,025.9	24.9	13.1	-9.29	-1,865.1	-1,349.6	1,039.1	1,016.6	22.50	46.173		
6,100.0	5,950.4	6,143.6	6,122.1	25.4	13.3	-9.79	-1,863.2	-1,342.7	1,010.9	987.9	22.97	44.010		
6,200.0	6,047.6	6,237.9	6,216.1	25.8	13.5	-10.34	-1,861.7	-1,335.7	983.0	959.5	23.45	41.922		
6,300.0	6,144.9	6,334.6	6,312.6	26.3	13.7	-10.93	-1,860.1	-1,328.4	955.1	931.1	23.95	39.880		
6,400.0	6,242.2	6,428.0	6,405.7	26.7	13.9	-11.54	-1,858.5	-1,321.4	927.3	902.8	24.45	37.920		
6,500.0	6,339.4	6,518.0	6,495.4	27.1	14.1	-12.14	-1,857.2	-1,315.1	900.0	875.0	24.95	36.066		
6,600.0	6,436.7	6,615.8	6,593.0	27.6	14.3	-12.81	-1,856.1	-1,308.7	873.3	847.9	25.49	34.259		
6,700.0	6,533.9	6,712.1	6,689.1	28.0	14.5	-13.47	-1,854.2	-1,302.8	846.2	820.1	26.03	32.508		
6,800.0	6,631.6	6,803.3	6,780.1	28.4	14.7	-13.93	-1,852.5	-1,298.0	821.3	794.7	26.58	30.897		
6,900.0	6,729.9	6,896.0	6,872.7	28.8	14.9	-14.43	-1,851.5	-1,292.7	800.4	773.2	27.14	29.496		
7,000.0	6,828.8	6,989.2	6,965.7	29.0	15.1	-14.95	-1,851.3	-1,287.3	783.5	755.8	27.68	28.310		
7,100.0	6,928.2	7,081.6	7,058.0	29.3	15.2	-15.42	-1,851.5	-1,282.4	770.7	742.5	28.18	27.352		
7,200.0	7,027.9	7,174.6	7,150.9	29.4	15.4	-15.83	-1,852.3	-1,278.3	762.2	733.6	28.63	26.620		
7,300.0	7,127.8	7,270.4	7,246.7	29.5	15.6	-16.18	-1,853.5	-1,274.6	757.8	728.7	29.05	26.088		
7,374.8	7,202.6	7,341.6	7,317.8	29.6	15.7	-18.95	-1,854.4	-1,272.7	756.7	727.4	29.32	25.807 CC, ES		
7,400.0	7,227.8	7,365.1	7,341.3	29.6	15.7	-36.54	-1,854.8	-1,272.2	757.1	727.7	29.40	25.748		
7,500.0	7,327.8	7,462.2	7,438.4	29.7	15.9	-36.72	-1,856.4	-1,270.6	757.7	728.0	29.77	25.450		
7,600.0	7,427.8	7,561.8	7,538.0	29.8	16.0	-36.87	-1,857.9	-1,269.6	758.1	727.9	30.14	25.152		
7,700.0	7,527.8	7,660.7	7,636.8	29.9	16.2	-37.02	-1,859.5	-1,268.8	758.2	727.7	30.51	24.851		
7,800.0	7,627.8	7,758.8	7,735.0	30.0	16.3	-37.20	-1,861.2	-1,268.0	758.3	727.4	30.88	24.556		
7,900.0	7,727.8	7,855.3	7,831.4	30.1	16.4	-37.35	-1,863.1	-1,267.6	758.7	727.4	31.24	24.286		
8,000.0	7,827.8	7,952.7	7,928.8	30.2	16.6	-37.49	-1,865.3	-1,267.5	759.5	727.9	31.60	24.039		
8,100.0	7,927.7	8,051.0	8,027.0	30.3	16.7	-37.62	-1,867.8	-1,267.6	760.7	728.7	31.95	23.807		
8,200.0	8,027.7	8,149.2	8,125.2	30.4	16.8	-37.75	-1,870.4	-1,267.9	762.0	729.7	32.30	23.590		
8,300.0	8,127.7	8,246.0	8,222.0	30.5	17.0	-37.85	-1,873.1	-1,268.6	763.7	731.0	32.64	23.396		
8,400.0	8,227.7	8,352.5	8,328.4	30.6	17.1	-37.92	-1,875.7	-1,269.7	765.1	732.1	32.98	23.197		
8,500.0	8,327.7	8,451.7	8,427.6	30.7	17.2	-37.98	-1,877.9	-1,270.7	766.3	732.9	33.32	22.999		
8,600.0	8,427.7	8,555.0	8,530.8	30.8	17.4	-38.07	-1,880.0	-1,271.3	767.1	733.4	33.67	22.785		
8,700.0	8,527.7	8,652.2	8,628.1	30.9	17.5	-38.16	-1,881.9	-1,271.9	767.9	733.9	34.00	22.584		
8,800.0	8,627.7	8,747.4	8,723.2	31.0	17.7	-38.21	-1,884.2	-1,272.9	769.4	735.0	34.33	22.413		
8,900.0	8,727.6	8,844.1	8,819.9	31.2	17.8	-38.24	-1,886.8	-1,274.6	771.3	736.6	34.64	22.264		
9,000.0	8,827.6	8,941.9	8,917.6	31.3	17.9	-38.25	-1,889.7	-1,276.6	773.6	738.6	34.96	22.130		
9,100.0	8,927.6	9,040.1	9,015.7	31.4	18.0	-38.25	-1,892.7	-1,278.9	776.0	740.8	35.26	22.009		
9,200.0	9,027.6	9,136.6	9,112.2	31.5	18.1	-38.18	-1,895.6	-1,282.0	778.9	743.3	35.55	21.911		
9,300.0	9,127.6	9,243.4	9,218.8	31.6	18.3	-38.13	-1,899.1	-1,285.3	781.9	746.0	35.86	21.806		
9,400.0	9,227.6	9,358.0	9,333.3	31.7	18.4	-38.11	-1,901.0	-1,287.6	782.8	746.6	36.19	21.634		
9,500.0	9,327.6	9,461.0	9,436.4	31.8	18.6	-38.06	-1,901.6	-1,289.7	783.0	746.5	36.49	21.457		
9,525.3	9,352.9	9,485.9	9,461.3	31.8	18.6	-38.05	-1,901.8	-1,290.1	783.0	746.4	36.57	21.411		
9,600.0	9,427.6	9,558.1	9,533.5	31.9	18.7	-38.04	-1,902.4	-1,291.2	783.1	746.3	36.80	21.279		
9,700.0	9,527.5	9,652.0	9,627.4	32.0	18.8	-38.04	-1,903.6	-1,292.7	783.6	746.5	37.11	21.117		
9,800.0	9,627.5	9,745.0	9,720.3	32.2	19.0	-38.00	-1,905.3	-1,294.9	785.0	747.6	37.40	20.990		
9,900.0	9,727.5	9,835.7	9,810.9	32.3	19.1	-37.92	-1,907.8	-1,298.1	787.7	750.0	37.67	20.909		
10,000.0	9,827.5	9,927.3	9,902.3	32.4	19.2	-37.80	-1,911.1	-1,302.1	791.4	753.4	37.94	20.861		
10,100.0	9,927.5	10,018.7	9,993.6	32.5	19.3	-37.65	-1,915.0	-1,307.0	796.1	758.0	38.19	20.847		
10,121.5	9,949.0	10,050.0	10,024.8	32.5	19.3	-37.59	-1,916.5	-1,308.8	797.4	759.1	38.25	20.844 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 6-32D
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 6-32D	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 6-32D
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 6-32D	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 NESE Sec 1-T6S-R97W - Chevron-Marathon 42D-1D - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 172-													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		
6,600.0	6,436.7	6,586.2	6,545.7	27.6	15.9	33.91	-1,432.3	-2,058.2	1,205.0	1,171.3	33.65	35.810		
6,700.0	6,533.9	6,678.8	6,638.2	28.0	16.0	34.67	-1,429.1	-2,060.1	1,186.6	1,152.3	34.29	34.600		
6,800.0	6,631.6	6,776.6	6,736.0	28.4	16.2	35.20	-1,426.9	-2,061.9	1,169.9	1,135.0	34.91	33.508		
6,900.0	6,729.9	6,872.9	6,832.2	28.8	16.3	35.63	-1,425.6	-2,063.4	1,156.3	1,120.8	35.46	32.610		
7,000.0	6,828.8	6,966.9	6,926.2	29.0	16.5	35.97	-1,424.7	-2,065.3	1,146.0	1,110.1	35.93	31.893		
7,100.0	6,928.2	7,065.3	7,024.6	29.3	16.6	36.25	-1,424.4	-2,067.2	1,138.8	1,102.4	36.35	31.332		
7,200.0	7,027.9	7,161.1	7,120.4	29.4	16.7	36.42	-1,424.9	-2,069.1	1,134.6	1,097.9	36.68	30.936		
7,279.6	7,107.5	7,237.1	7,196.4	29.5	16.8	36.50	-1,425.7	-2,070.8	1,133.6	1,096.7	36.89	30.733 CC		
7,300.0	7,127.8	7,257.4	7,216.7	29.5	16.9	36.51	-1,425.9	-2,071.3	1,133.7	1,096.7	36.94	30.692		
7,400.0	7,227.8	7,357.2	7,316.5	29.6	17.0	36.35	-1,427.5	-2,073.6	1,135.5	1,098.4	37.15	30.568		
7,500.0	7,327.8	7,461.8	7,420.9	29.7	17.1	36.28	-1,429.4	-2,075.8	1,137.7	1,100.3	37.37	30.442		
7,600.0	7,427.8	7,575.4	7,534.6	29.8	17.3	36.25	-1,430.9	-2,077.3	1,138.6	1,101.0	37.63	30.260		
7,700.0	7,527.8	7,674.1	7,633.2	29.9	17.4	36.23	-1,431.6	-2,078.1	1,138.3	1,100.5	37.87	30.058		
7,760.3	7,588.1	7,730.1	7,689.2	30.0	17.5	36.22	-1,432.3	-2,078.7	1,138.2	1,100.2	38.01	29.946		
7,800.0	7,627.8	7,766.7	7,725.8	30.0	17.5	36.21	-1,432.8	-2,079.1	1,138.3	1,100.2	38.10	29.876		
7,900.0	7,727.8	7,870.7	7,829.8	30.1	17.6	36.17	-1,434.4	-2,080.5	1,138.4	1,100.1	38.34	29.694		
8,000.0	7,827.8	7,979.7	7,938.8	30.2	17.8	36.16	-1,435.4	-2,081.4	1,137.9	1,099.3	38.60	29.478		
8,100.0	7,927.7	8,076.5	8,035.6	30.3	17.9	36.17	-1,435.7	-2,082.1	1,137.2	1,098.3	38.86	29.262		
8,200.0	8,027.7	8,174.0	8,133.1	30.4	18.1	36.19	-1,435.9	-2,083.0	1,136.7	1,097.5	39.12	29.053		
8,292.7	8,120.5	8,262.4	8,221.5	30.5	18.2	36.19	-1,436.6	-2,084.0	1,136.5	1,097.1	39.35	28.879		
8,300.0	8,127.7	8,269.0	8,228.0	30.5	18.2	36.19	-1,436.7	-2,084.1	1,136.5	1,097.1	39.37	28.866		
8,400.0	8,227.7	8,363.8	8,322.9	30.6	18.3	36.16	-1,438.0	-2,085.6	1,136.9	1,097.3	39.61	28.701		
8,500.0	8,327.7	8,472.1	8,431.2	30.7	18.5	36.15	-1,439.1	-2,087.1	1,137.0	1,097.1	39.88	28.512		
8,600.0	8,427.7	8,570.3	8,529.3	30.8	18.6	36.14	-1,440.1	-2,088.1	1,136.7	1,096.6	40.13	28.325		
8,606.4	8,434.1	8,576.1	8,535.1	30.8	18.6	36.13	-1,440.2	-2,088.2	1,136.7	1,096.5	40.14	28.315 ES		
8,700.0	8,527.7	8,661.1	8,620.1	30.9	18.7	36.10	-1,441.6	-2,089.5	1,137.1	1,096.7	40.36	28.171		
8,800.0	8,627.7	8,760.9	8,719.8	31.0	18.8	36.03	-1,443.9	-2,091.4	1,138.0	1,097.4	40.59	28.038		
8,900.0	8,727.6	8,870.4	8,829.3	31.2	19.0	35.90	-1,447.4	-2,092.6	1,138.4	1,097.6	40.80	27.902		
8,953.8	8,781.4	8,923.4	8,882.3	31.2	19.0	35.81	-1,449.5	-2,092.9	1,138.3	1,097.4	40.90	27.829		
9,000.0	8,827.6	8,964.6	8,923.4	31.3	19.1	35.74	-1,451.2	-2,093.2	1,138.4	1,097.4	40.99	27.772		
9,100.0	8,927.6	9,055.1	9,013.8	31.4	19.2	35.60	-1,454.7	-2,094.5	1,139.3	1,098.1	41.19	27.659		
9,200.0	9,027.6	9,163.5	9,122.2	31.5	19.3	35.47	-1,458.4	-2,096.5	1,140.5	1,099.0	41.42	27.533		
9,300.0	9,127.6	9,256.9	9,215.5	31.6	19.4	35.39	-1,461.0	-2,098.0	1,141.2	1,099.5	41.65	27.402		
9,400.0	9,227.6	9,347.7	9,306.2	31.7	19.5	35.28	-1,464.2	-2,100.0	1,142.7	1,100.9	41.86	27.301		
9,500.0	9,327.6	9,444.3	9,402.7	31.8	19.7	35.14	-1,468.1	-2,102.6	1,144.9	1,102.8	42.07	27.215		
9,600.0	9,427.6	9,541.3	9,499.6	31.9	19.8	34.99	-1,472.3	-2,105.4	1,147.2	1,105.0	42.28	27.136		
9,700.0	9,527.5	9,638.8	9,597.0	32.0	19.9	34.83	-1,476.9	-2,108.3	1,149.9	1,107.4	42.48	27.065		
9,800.0	9,627.5	9,729.4	9,687.4	32.2	20.0	34.68	-1,481.2	-2,111.4	1,152.9	1,110.2	42.69	27.007		
9,900.0	9,727.5	9,822.0	9,779.8	32.3	20.2	34.52	-1,485.9	-2,115.4	1,156.9	1,114.0	42.90	26.970		
10,000.0	9,827.5	9,926.5	9,884.0	32.4	20.3	34.35	-1,491.2	-2,120.0	1,161.0	1,117.9	43.12	26.927		
10,100.0	9,927.5	10,020.0	9,977.4	32.5	20.4	34.20	-1,495.8	-2,123.8	1,164.8	1,121.5	43.33	26.883 SF		
10,121.5	9,949.0	10,020.0	9,977.4	32.5	20.4	34.20	-1,495.8	-2,123.8	1,165.9	1,122.6	43.36	26.891		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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	36.68	96.2	71.6	119.9				
100.0	100.0	100.0	100.0	0.1	0.1	36.68	96.2	71.6	119.9	119.6	0.27	440.369	
200.0	200.0	200.0	200.0	0.3	0.3	36.68	96.2	71.6	119.9	119.3	0.62	192.971	CC, ES
300.0	300.0	302.1	302.1	0.5	0.5	177.57	94.5	72.3	120.8	119.8	0.98	123.615	
400.0	399.8	404.0	403.8	0.7	0.7	179.88	89.5	74.5	123.5	122.1	1.35	91.741	
500.0	499.5	504.9	504.4	0.9	0.9	-176.60	81.4	78.0	128.5	126.8	1.74	74.057	
600.0	598.7	604.2	603.2	1.2	1.1	-173.21	72.7	81.8	137.1	135.0	2.13	64.319	
700.0	697.5	703.2	701.7	1.5	1.4	-170.44	64.0	85.5	149.5	147.0	2.54	58.983	
800.0	795.6	801.7	799.8	1.9	1.6	-168.31	55.3	89.3	165.7	162.7	2.95	56.238	
900.0	893.1	899.7	897.3	2.3	1.8	-166.79	46.7	93.0	185.2	181.8	3.36	55.031	
1,000.0	990.3	997.5	994.7	2.7	2.1	-165.67	38.0	96.7	205.6	201.8	3.80	54.121	
1,100.0	1,087.6	1,095.3	1,092.1	3.1	2.3	-164.76	29.4	100.4	226.2	221.9	4.24	53.335	
1,200.0	1,184.9	1,193.2	1,189.4	3.6	2.5	-164.00	20.8	104.2	246.7	242.1	4.69	52.651	
1,300.0	1,282.1	1,291.0	1,286.8	4.0	2.8	-163.36	12.2	107.9	267.4	262.2	5.14	52.051	
1,400.0	1,379.4	1,388.8	1,384.1	4.4	3.0	-162.80	3.6	111.6	288.0	282.4	5.59	51.521	
1,500.0	1,476.6	1,486.6	1,481.5	4.9	3.2	-162.33	-5.0	115.3	308.7	302.6	6.05	51.051	
1,600.0	1,573.9	1,584.4	1,578.9	5.3	3.5	-161.91	-13.6	119.0	329.3	322.8	6.50	50.632	
1,700.0	1,671.1	1,682.2	1,676.2	5.8	3.7	-161.54	-22.2	122.8	350.0	343.1	6.97	50.256	
1,800.0	1,768.4	1,780.0	1,773.6	6.2	4.0	-161.21	-30.8	126.5	370.7	363.3	7.43	49.917	
1,900.0	1,865.6	1,877.8	1,870.9	6.7	4.2	-160.92	-39.5	130.2	391.5	383.6	7.89	49.611	
2,000.0	1,962.9	1,975.7	1,968.3	7.1	4.4	-160.65	-48.1	133.9	412.2	403.8	8.36	49.332	
2,100.0	2,060.2	2,073.5	2,065.7	7.5	4.7	-160.42	-56.7	137.6	432.9	424.1	8.82	49.078	
2,200.0	2,157.4	2,171.3	2,163.0	8.0	4.9	-160.20	-65.3	141.4	453.7	444.4	9.29	48.845	
2,300.0	2,254.7	2,269.1	2,260.4	8.4	5.1	-160.00	-73.9	145.1	474.4	464.7	9.76	48.631	
2,400.0	2,351.9	2,366.9	2,357.8	8.9	5.4	-159.82	-82.5	148.8	495.2	484.9	10.22	48.434	
2,500.0	2,449.2	2,464.7	2,455.1	9.3	5.6	-159.66	-91.1	152.5	515.9	505.2	10.69	48.252	
2,600.0	2,546.4	2,562.5	2,552.5	9.8	5.8	-159.50	-99.7	156.2	536.7	525.5	11.16	48.083	
2,700.0	2,643.7	2,660.3	2,649.8	10.2	6.1	-159.36	-108.4	160.0	557.5	545.8	11.63	47.926	
2,800.0	2,740.9	2,758.1	2,747.2	10.7	6.3	-159.23	-117.0	163.7	578.2	566.1	12.10	47.780	
2,900.0	2,838.2	2,856.0	2,844.6	11.1	6.6	-159.10	-125.6	167.4	599.0	586.4	12.57	47.643	
3,000.0	2,935.5	2,953.8	2,941.9	11.5	6.8	-158.99	-134.2	171.1	619.8	606.7	13.04	47.515	
3,100.0	3,032.7	3,051.6	3,039.3	12.0	7.0	-158.88	-142.8	174.8	640.5	627.0	13.51	47.396	
3,200.0	3,130.0	3,149.4	3,136.6	12.4	7.3	-158.78	-151.4	178.6	661.3	647.3	13.99	47.283	
3,300.0	3,227.2	3,247.2	3,234.0	12.9	7.5	-158.69	-160.0	182.3	682.1	667.6	14.46	47.177	
3,400.0	3,324.5	3,345.0	3,331.4	13.3	7.7	-158.60	-168.6	186.0	702.9	687.9	14.93	47.077	
3,500.0	3,421.7	3,442.8	3,428.7	13.8	8.0	-158.52	-177.2	189.7	723.7	708.3	15.40	46.983	
3,600.0	3,519.0	3,540.6	3,526.1	14.2	8.2	-158.44	-185.9	193.4	744.4	728.6	15.87	46.894	
3,700.0	3,616.2	3,638.4	3,623.4	14.7	8.4	-158.36	-194.5	197.2	765.2	748.9	16.35	46.809	
3,800.0	3,713.5	3,736.3	3,720.8	15.1	8.7	-158.29	-203.1	200.9	786.0	769.2	16.82	46.729	
3,900.0	3,810.8	3,834.1	3,818.2	15.6	8.9	-158.23	-211.7	204.6	806.8	789.5	17.29	46.653	
4,000.0	3,908.0	3,931.9	3,915.5	16.0	9.2	-158.16	-220.3	208.3	827.6	809.8	17.77	46.581	
4,100.0	4,005.3	4,029.7	4,012.9	16.4	9.4	-158.10	-228.9	212.0	848.4	830.1	18.24	46.512	
4,200.0	4,102.5	4,127.5	4,110.2	16.9	9.6	-158.04	-237.5	215.8	869.2	850.4	18.71	46.446	
4,300.0	4,199.8	4,225.3	4,207.6	17.3	9.9	-157.99	-246.1	219.5	889.9	870.8	19.19	46.383	
4,400.0	4,297.0	4,323.1	4,305.0	17.8	10.1	-157.94	-254.8	223.2	910.7	891.1	19.66	46.324	
4,500.0	4,394.3	4,420.9	4,402.3	18.2	10.3	-157.89	-263.4	226.9	931.5	911.4	20.13	46.266	
4,600.0	4,491.6	4,518.7	4,499.7	18.7	10.6	-157.84	-272.0	230.6	952.3	931.7	20.61	46.212	
4,700.0	4,588.8	4,616.6	4,597.0	19.1	10.8	-157.79	-280.6	234.4	973.1	952.0	21.08	46.159	
4,800.0	4,686.1	4,714.4	4,694.4	19.6	11.0	-157.75	-289.2	238.1	993.9	972.4	21.56	46.109	
4,900.0	4,783.3	4,812.2	4,791.8	20.0	11.3	-157.71	-297.8	241.8	1,014.7	992.7	22.03	46.060	
5,000.0	4,880.6	4,910.0	4,889.1	20.5	11.5	-157.67	-306.4	245.5	1,035.5	1,013.0	22.50	46.014	
5,100.0	4,977.8	5,007.8	4,986.5	20.9	11.8	-157.63	-315.0	249.2	1,056.3	1,033.3	22.98	45.969	

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 6-32D
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 6-32D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design												Sec 6 T6S R96W (F06 696) - Chevron 6-19D - DD - Plan #2		Offset Site Error:		0.0 ft			
Survey Program:				0-MWD												Offset Well Error:		0.0 ft	
Reference		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							
5,200.0	5,075.1	5,105.6	5,083.8	21.4	12.0	-157.59	-323.7	253.0	1,077.1	1,053.6	23.45	45.927							
5,300.0	5,172.3	5,203.4	5,181.2	21.8	12.2	-157.55	-332.3	256.7	1,097.9	1,074.0	23.93	45.885							
5,400.0	5,269.6	5,301.2	5,278.6	22.2	12.5	-157.52	-340.9	260.4	1,118.7	1,094.3	24.40	45.845							
5,500.0	5,366.9	5,399.1	5,375.9	22.7	12.7	-157.48	-349.5	264.1	1,139.5	1,114.6	24.88	45.807							
5,600.0	5,464.1	5,496.9	5,473.3	23.1	12.9	-157.45	-358.1	267.8	1,160.3	1,134.9	25.35	45.770							
5,700.0	5,561.4	5,594.7	5,570.7	23.6	13.2	-157.42	-366.7	271.6	1,181.1	1,155.2	25.82	45.734							
5,800.0	5,658.6	5,692.5	5,668.0	24.0	13.4	-157.39	-375.3	275.3	1,201.9	1,175.6	26.30	45.700 SF							

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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				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	36.70	108.2	80.6	134.9					
100.0	100.0	100.0	100.0	0.1	0.1	36.70	108.2	80.6	134.9	134.7	0.27	495.570		
200.0	200.0	200.0	200.0	0.3	0.3	36.70	108.2	80.6	134.9	134.3	0.62	217.160 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	176.84	108.2	80.6	136.7	135.7	0.97	140.894		
400.0	399.8	399.8	399.8	0.7	0.7	176.95	108.2	80.6	141.9	140.6	1.32	107.697		
500.0	499.5	499.5	499.5	0.9	0.8	177.12	108.2	80.6	150.6	148.9	1.66	90.545		
600.0	598.7	599.3	599.3	1.2	1.0	177.93	107.0	81.9	162.6	160.6	2.01	80.920		
700.0	697.5	698.5	698.4	1.5	1.2	179.78	103.4	85.6	177.8	175.4	2.36	75.283		
800.0	795.6	796.7	796.2	1.9	1.4	-177.83	97.9	91.3	196.4	193.7	2.72	72.155		
900.0	893.1	893.9	893.1	2.3	1.6	-175.82	92.2	97.3	218.6	215.5	3.09	70.709		
1,000.0	990.3	991.0	989.8	2.7	1.8	-174.22	86.5	103.2	241.9	238.4	3.48	69.551		
1,100.0	1,087.6	1,088.0	1,086.5	3.1	2.0	-172.90	80.8	109.1	265.4	261.5	3.87	68.537		
1,200.0	1,184.9	1,185.1	1,183.2	3.6	2.2	-171.79	75.1	115.0	288.9	284.6	4.27	67.641		
1,300.0	1,282.1	1,282.1	1,279.9	4.0	2.4	-170.85	69.3	120.9	312.6	307.9	4.68	66.844		
1,400.0	1,379.4	1,379.1	1,376.6	4.4	2.7	-170.04	63.6	126.8	336.3	331.2	5.08	66.132		
1,500.0	1,476.6	1,476.2	1,473.3	4.9	2.9	-169.34	57.9	132.8	360.0	354.5	5.50	65.493		
1,600.0	1,573.9	1,573.2	1,570.0	5.3	3.1	-168.73	52.2	138.7	383.9	377.9	5.91	64.917		
1,700.0	1,671.1	1,670.3	1,666.7	5.8	3.3	-168.18	46.5	144.6	407.7	401.4	6.33	64.396		
1,800.0	1,768.4	1,767.3	1,763.4	6.2	3.5	-167.70	40.8	150.5	431.6	424.8	6.75	63.922		
1,900.0	1,865.6	1,864.4	1,860.1	6.7	3.7	-167.27	35.1	156.4	455.5	448.3	7.17	63.490		
2,000.0	1,962.9	1,961.4	1,956.7	7.1	4.0	-166.88	29.4	162.3	479.4	471.8	7.60	63.095		
2,100.0	2,060.2	2,058.5	2,053.4	7.5	4.2	-166.53	23.7	168.3	503.4	495.4	8.02	62.733		
2,200.0	2,157.4	2,155.5	2,150.1	8.0	4.4	-166.21	18.0	174.2	527.3	518.9	8.45	62.400		
2,300.0	2,254.7	2,252.6	2,246.8	8.4	4.6	-165.91	12.3	180.1	551.3	542.4	8.88	62.092		
2,400.0	2,351.9	2,349.6	2,343.5	8.9	4.8	-165.64	6.6	186.0	575.3	566.0	9.31	61.808		
2,500.0	2,449.2	2,446.6	2,440.2	9.3	5.1	-165.40	0.9	191.9	599.3	589.6	9.74	61.544		
2,600.0	2,546.4	2,543.7	2,536.9	9.8	5.3	-165.17	-4.8	197.8	623.3	613.2	10.17	61.299		
2,700.0	2,643.7	2,640.7	2,633.6	10.2	5.5	-164.96	-10.5	203.8	647.4	636.7	10.60	61.070		
2,800.0	2,740.9	2,737.8	2,730.3	10.7	5.7	-164.76	-16.2	209.7	671.4	660.3	11.03	60.856		
2,900.0	2,838.2	2,834.8	2,827.0	11.1	5.9	-164.58	-21.9	215.6	695.4	683.9	11.46	60.657		
3,000.0	2,935.5	2,931.9	2,923.7	11.5	6.2	-164.41	-27.6	221.5	719.5	707.6	11.90	60.469		
3,100.0	3,032.7	3,028.9	3,020.4	12.0	6.4	-164.25	-33.3	227.4	743.5	731.2	12.33	60.293		
3,200.0	3,130.0	3,126.0	3,117.1	12.4	6.6	-164.10	-39.0	233.4	767.6	754.8	12.77	60.127		
3,300.0	3,227.2	3,223.0	3,213.8	12.9	6.8	-163.96	-44.7	239.3	791.6	778.4	13.20	59.971		
3,400.0	3,324.5	3,320.1	3,310.5	13.3	7.0	-163.83	-50.4	245.2	815.7	802.0	13.63	59.824		
3,500.0	3,421.7	3,417.1	3,407.2	13.8	7.3	-163.71	-56.1	251.1	839.7	825.7	14.07	59.684		
3,600.0	3,519.0	3,514.1	3,503.9	14.2	7.5	-163.59	-61.8	257.0	863.8	849.3	14.51	59.552		
3,700.0	3,616.2	3,611.2	3,600.6	14.7	7.7	-163.48	-67.5	262.9	887.9	872.9	14.94	59.427		
3,800.0	3,713.5	3,708.2	3,697.3	15.1	7.9	-163.37	-73.2	268.9	912.0	896.6	15.38	59.308		
3,900.0	3,810.8	3,805.3	3,794.0	15.6	8.2	-163.28	-79.0	274.8	936.0	920.2	15.81	59.195		
4,000.0	3,908.0	3,902.3	3,890.7	16.0	8.4	-163.18	-84.7	280.7	960.1	943.9	16.25	59.087		
4,100.0	4,005.3	3,999.4	3,987.4	16.4	8.6	-163.09	-90.4	286.6	984.2	967.5	16.69	58.985		
4,200.0	4,102.5	4,096.4	4,084.1	16.9	8.8	-163.00	-96.1	292.5	1,008.3	991.2	17.12	58.887		
4,300.0	4,199.8	4,193.5	4,180.8	17.3	9.0	-162.92	-101.8	298.4	1,032.4	1,014.8	17.56	58.794		
4,400.0	4,297.0	4,290.5	4,277.5	17.8	9.3	-162.84	-107.5	304.4	1,056.4	1,038.5	18.00	58.704		
4,500.0	4,394.3	4,387.6	4,374.2	18.2	9.5	-162.77	-113.2	310.3	1,080.5	1,062.1	18.43	58.619		
4,600.0	4,491.6	4,484.6	4,470.9	18.7	9.7	-162.70	-118.9	316.2	1,104.6	1,085.8	18.87	58.537		
4,700.0	4,588.8	4,581.6	4,567.6	19.1	9.9	-162.63	-124.6	322.1	1,128.7	1,109.4	19.31	58.459		
4,800.0	4,686.1	4,678.7	4,664.3	19.6	10.1	-162.57	-130.3	328.0	1,152.8	1,133.1	19.75	58.383		
4,900.0	4,783.3	4,775.7	4,761.0	20.0	10.4	-162.50	-136.0	333.9	1,176.9	1,156.7	20.18	58.311		
5,000.0	4,880.6	4,872.8	4,857.7	20.5	10.6	-162.44	-141.7	339.9	1,201.0	1,180.4	20.62	58.242 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 6-32D
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 6-32D	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	36.65	84.1	62.6	104.9					
100.0	100.0	100.0	100.0	0.1	0.1	36.65	84.1	62.6	104.9	104.6	0.27	385.169		
200.0	200.0	200.0	200.0	0.3	0.3	36.65	84.1	62.6	104.9	104.2	0.62	168.782 CC, ES		
300.0	300.0	302.5	302.5	0.5	0.5	177.54	82.3	62.9	105.4	104.4	0.98	107.905		
400.0	399.8	404.9	404.7	0.7	0.7	179.84	76.9	63.9	107.1	105.8	1.34	79.783		
500.0	499.5	507.0	506.4	0.9	0.9	-176.50	68.0	65.6	110.4	108.6	1.73	63.723		
600.0	598.7	608.7	607.3	1.2	1.2	-171.77	55.5	68.0	115.6	113.4	2.16	53.498		
700.0	697.5	707.9	705.5	1.5	1.5	-167.13	41.6	70.6	124.1	121.4	2.62	47.425		
800.0	795.6	806.8	803.4	1.9	1.8	-163.49	27.7	73.2	136.5	133.4	3.10	44.112		
900.0	893.1	905.3	900.8	2.3	2.1	-160.86	13.8	75.8	152.6	149.0	3.60	42.417		
1,000.0	990.3	1,003.6	998.2	2.7	2.4	-158.91	0.0	78.4	169.7	165.6	4.12	41.152		
1,100.0	1,087.6	1,102.0	1,095.6	3.1	2.6	-157.32	-13.8	81.0	187.0	182.4	4.67	40.087		
1,200.0	1,184.9	1,200.4	1,192.9	3.6	2.9	-156.00	-27.7	83.6	204.5	199.2	5.22	39.184		
1,300.0	1,282.1	1,298.8	1,290.3	4.0	3.2	-154.88	-41.5	86.2	222.0	216.2	5.78	38.414		
1,400.0	1,379.4	1,397.1	1,387.6	4.4	3.5	-153.93	-55.3	88.8	239.5	233.2	6.35	37.751		
1,500.0	1,476.6	1,495.5	1,485.0	4.9	3.8	-153.11	-69.2	91.4	257.2	250.3	6.92	37.176		
1,600.0	1,573.9	1,593.9	1,582.3	5.3	4.1	-152.39	-83.0	94.0	274.9	267.4	7.49	36.674		
1,700.0	1,671.1	1,692.2	1,679.7	5.8	4.4	-151.76	-96.8	96.6	292.6	284.5	8.07	36.234		
1,800.0	1,768.4	1,790.6	1,777.1	6.2	4.7	-151.20	-110.7	99.2	310.3	301.7	8.66	35.844		
1,900.0	1,865.6	1,889.0	1,874.4	6.7	5.0	-150.71	-124.5	101.8	328.1	318.8	9.24	35.497		
2,000.0	1,962.9	1,987.3	1,971.8	7.1	5.3	-150.26	-138.3	104.4	345.9	336.0	9.83	35.186		
2,100.0	2,060.2	2,085.7	2,069.1	7.5	5.6	-149.86	-152.2	107.0	363.7	353.3	10.42	34.907		
2,200.0	2,157.4	2,184.1	2,166.5	8.0	5.9	-149.49	-166.0	109.6	381.5	370.5	11.01	34.655		
2,300.0	2,254.7	2,282.5	2,263.9	8.4	6.2	-149.16	-179.8	112.2	399.3	387.7	11.60	34.426		
2,400.0	2,351.9	2,380.8	2,361.2	8.9	6.5	-148.85	-193.7	114.8	417.2	405.0	12.19	34.217		
2,500.0	2,449.2	2,479.2	2,458.6	9.3	6.8	-148.58	-207.5	117.4	435.1	422.3	12.79	34.026		
2,600.0	2,546.4	2,577.6	2,555.9	9.8	7.1	-148.32	-221.3	120.0	452.9	439.5	13.38	33.851		
2,700.0	2,643.7	2,675.9	2,653.3	10.2	7.4	-148.08	-235.2	122.6	470.8	456.8	13.97	33.689		
2,800.0	2,740.9	2,774.3	2,750.6	10.7	7.7	-147.86	-249.0	125.2	488.7	474.1	14.57	33.540		
2,900.0	2,838.2	2,872.7	2,848.0	11.1	8.0	-147.66	-262.8	127.8	506.6	491.4	15.17	33.402		
3,000.0	2,935.5	2,971.1	2,945.4	11.5	8.3	-147.46	-276.7	130.4	524.5	508.7	15.76	33.273		
3,100.0	3,032.7	3,069.4	3,042.7	12.0	8.6	-147.29	-290.5	133.0	542.4	526.0	16.36	33.154		
3,200.0	3,130.0	3,167.8	3,140.1	12.4	8.9	-147.12	-304.4	135.6	560.3	543.3	16.96	33.042		
3,300.0	3,227.2	3,266.2	3,237.4	12.9	9.2	-146.96	-318.2	138.2	578.2	560.7	17.55	32.937		
3,400.0	3,324.5	3,364.5	3,334.8	13.3	9.5	-146.82	-332.0	140.8	596.1	578.0	18.15	32.839		
3,500.0	3,421.7	3,462.9	3,432.2	13.8	9.8	-146.68	-345.9	143.4	614.0	595.3	18.75	32.747		
3,600.0	3,519.0	3,561.3	3,529.5	14.2	10.1	-146.55	-359.7	146.0	632.0	612.6	19.35	32.661		
3,700.0	3,616.2	3,659.7	3,626.9	14.7	10.4	-146.42	-373.5	148.6	649.9	629.9	19.95	32.579		
3,800.0	3,713.5	3,758.0	3,724.2	15.1	10.7	-146.31	-387.4	151.2	667.8	647.3	20.55	32.502		
3,900.0	3,810.8	3,856.4	3,821.6	15.6	11.0	-146.20	-401.2	153.8	685.8	664.6	21.15	32.429		
4,000.0	3,908.0	3,954.8	3,918.9	16.0	11.3	-146.09	-415.0	156.4	703.7	681.9	21.75	32.360		
4,100.0	4,005.3	4,053.1	4,016.3	16.4	11.6	-145.99	-428.9	159.0	721.6	699.3	22.35	32.294		
4,200.0	4,102.5	4,151.5	4,113.7	16.9	11.9	-145.90	-442.7	161.6	739.6	716.6	22.94	32.232		
4,300.0	4,199.8	4,249.9	4,211.0	17.3	12.2	-145.81	-456.5	164.2	757.5	734.0	23.54	32.173		
4,400.0	4,297.0	4,348.2	4,308.4	17.8	12.5	-145.72	-470.4	166.8	775.4	751.3	24.14	32.117		
4,500.0	4,394.3	4,446.6	4,405.7	18.2	12.8	-145.64	-484.2	169.4	793.4	768.6	24.74	32.063		
4,600.0	4,491.6	4,545.0	4,503.1	18.7	13.1	-145.56	-498.0	172.0	811.3	786.0	25.34	32.012		
4,700.0	4,588.8	4,643.4	4,600.5	19.1	13.4	-145.48	-511.9	174.6	829.3	803.3	25.95	31.963		
4,800.0	4,686.1	4,741.7	4,697.8	19.6	13.7	-145.41	-525.7	177.2	847.2	820.7	26.55	31.916		
4,900.0	4,783.3	4,840.1	4,795.2	20.0	14.0	-145.34	-539.5	179.8	865.2	838.0	27.15	31.871		
5,000.0	4,880.6	4,938.5	4,892.5	20.5	14.3	-145.28	-553.4	182.4	883.1	855.4	27.75	31.828		
5,100.0	4,977.8	5,036.8	4,989.9	20.9	14.6	-145.21	-567.2	185.0	901.1	872.7	28.35	31.787		

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 6-32D
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 6-32D	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		
5,200.0	5,075.1	5,135.2	5,087.2	21.4	14.9	-145.15	-581.0	187.6	919.0	890.1	28.95	31.748		
5,300.0	5,172.3	5,233.6	5,184.6	21.8	15.2	-145.09	-594.9	190.2	937.0	907.4	29.55	31.710		
5,400.0	5,269.6	5,332.0	5,282.0	22.2	15.5	-145.04	-608.7	192.8	954.9	924.8	30.15	31.673		
5,500.0	5,366.9	5,430.3	5,379.3	22.7	15.8	-144.98	-622.5	195.4	972.9	942.1	30.75	31.638		
5,600.0	5,464.1	5,528.7	5,476.7	23.1	16.1	-144.93	-636.4	198.0	990.8	959.5	31.35	31.605		
5,700.0	5,561.4	5,627.1	5,574.0	23.6	16.4	-144.88	-650.2	200.6	1,008.8	976.9	31.95	31.572		
5,800.0	5,658.6	5,725.4	5,671.4	24.0	16.7	-144.83	-664.0	203.2	1,026.8	994.2	32.55	31.541		
5,900.0	5,755.9	5,823.8	5,768.8	24.5	17.0	-144.78	-677.9	205.8	1,044.7	1,011.6	33.15	31.510		
6,000.0	5,853.1	5,922.2	5,866.1	24.9	17.3	-144.74	-691.7	208.4	1,062.7	1,028.9	33.76	31.481		
6,100.0	5,950.4	6,020.5	5,963.5	25.4	17.6	-144.69	-705.5	211.0	1,080.6	1,046.3	34.36	31.453		
6,200.0	6,047.6	6,118.9	6,060.8	25.8	17.9	-144.65	-719.4	213.6	1,098.6	1,063.6	34.96	31.426		
6,300.0	6,144.9	6,217.3	6,158.2	26.3	18.2	-144.61	-733.2	216.2	1,116.6	1,081.0	35.56	31.400		
6,400.0	6,242.2	6,315.7	6,255.5	26.7	18.5	-144.57	-747.0	218.8	1,134.5	1,098.4	36.16	31.374		
6,500.0	6,339.4	6,414.0	6,352.9	27.1	18.8	-144.53	-760.9	221.4	1,152.5	1,115.7	36.76	31.349		
6,600.0	6,436.7	6,512.4	6,450.3	27.6	19.1	-144.49	-774.7	224.0	1,170.4	1,133.1	37.36	31.326		
6,700.0	6,533.9	6,610.8	6,547.6	28.0	19.4	-144.46	-788.5	226.6	1,188.4	1,150.4	37.97	31.302		
6,800.0	6,631.6	6,709.4	6,645.2	28.4	19.7	-144.57	-802.4	229.2	1,204.9	1,166.4	38.58	31.234		
6,900.0	6,729.9	6,808.4	6,743.2	28.8	20.0	-144.55	-816.3	231.8	1,218.6	1,179.5	39.19	31.099 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	36.55	120.6	89.4	150.1					
100.0	100.0	100.0	100.0	0.1	0.1	36.55	120.6	89.4	150.1	0.27	551.226			
200.0	200.0	200.0	200.0	0.3	0.3	36.55	120.6	89.4	150.1	0.62	241.549 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	176.69	120.6	89.4	151.8	0.97	156.516			
400.0	399.8	399.8	399.8	0.7	0.7	176.79	120.6	89.4	157.1	1.32	119.196			
500.0	499.5	499.5	499.5	0.9	0.8	176.95	120.6	89.4	165.8	1.66	99.652			
600.0	598.7	598.7	598.7	1.2	1.0	177.15	120.6	89.4	177.9	2.01	88.671			
700.0	697.5	697.5	697.5	1.5	1.2	177.37	120.6	89.4	193.5	2.35	82.481			
800.0	795.6	795.6	795.6	1.9	1.4	177.59	120.6	89.4	212.6	2.68	79.251			
900.0	893.1	893.1	893.1	2.3	1.5	177.80	120.6	89.4	235.0	3.02	77.851			
1,000.0	990.3	990.3	990.3	2.7	1.7	178.00	120.6	89.4	258.2	3.36	76.817			
1,100.0	1,087.6	1,081.9	1,081.9	3.1	1.9	178.33	120.7	90.5	282.4	3.69	76.422 SF			
1,200.0	1,184.9	1,171.6	1,171.5	3.6	2.0	178.99	121.2	94.5	308.7	4.03	76.676			
1,300.0	1,282.1	1,260.1	1,259.7	4.0	2.2	179.87	122.0	101.1	337.2	4.36	77.375			
1,400.0	1,379.4	1,351.9	1,351.1	4.4	2.4	-179.08	123.2	110.3	367.7	4.70	78.205			
1,500.0	1,476.6	1,446.8	1,445.5	4.9	2.6	-178.14	124.4	120.0	398.4	5.05	78.824			
1,600.0	1,573.9	1,541.8	1,540.0	5.3	2.8	-177.33	125.6	129.8	429.2	5.41	79.324			
1,700.0	1,671.1	1,636.8	1,634.4	5.8	3.0	-176.63	126.8	139.6	460.1	5.77	79.732			
1,800.0	1,768.4	1,731.8	1,728.9	6.2	3.2	-176.02	128.0	149.3	491.0	6.13	80.070			
1,900.0	1,865.6	1,826.7	1,823.3	6.7	3.4	-175.47	129.2	159.1	522.0	6.50	80.353			
2,000.0	1,962.9	1,921.7	1,917.8	7.1	3.6	-175.00	130.5	168.9	553.0	6.86	80.591			
2,100.0	2,060.2	2,016.7	2,012.3	7.5	3.9	-174.57	131.7	178.6	584.1	7.23	80.794			
2,200.0	2,157.4	2,111.6	2,106.7	8.0	4.1	-174.18	132.9	188.4	615.2	7.60	80.968			
2,300.0	2,254.7	2,206.6	2,201.2	8.4	4.3	-173.83	134.1	198.1	646.3	7.97	81.119			
2,400.0	2,351.9	2,301.6	2,295.6	8.9	4.5	-173.52	135.3	207.9	677.4	8.34	81.249			
2,500.0	2,449.2	2,396.6	2,390.1	9.3	4.8	-173.23	136.5	217.7	708.5	8.71	81.363			
2,600.0	2,546.4	2,491.5	2,484.6	9.8	5.0	-172.96	137.8	227.4	739.7	9.08	81.464			
2,700.0	2,643.7	2,586.5	2,579.0	10.2	5.2	-172.72	139.0	237.2	770.9	9.45	81.552			
2,800.0	2,740.9	2,681.5	2,673.5	10.7	5.5	-172.49	140.2	247.0	802.0	9.83	81.631			
2,900.0	2,838.2	2,776.4	2,767.9	11.1	5.7	-172.29	141.4	256.7	833.2	10.20	81.701			
3,000.0	2,935.5	2,871.4	2,862.4	11.5	5.9	-172.09	142.6	266.5	864.4	10.57	81.764			
3,100.0	3,032.7	2,966.4	2,956.9	12.0	6.2	-171.92	143.8	276.2	895.6	10.95	81.821			
3,200.0	3,130.0	3,061.3	3,051.3	12.4	6.4	-171.75	145.0	286.0	926.8	11.32	81.872			
3,300.0	3,227.2	3,156.3	3,145.8	12.9	6.6	-171.59	146.3	295.8	958.1	11.70	81.918			
3,400.0	3,324.5	3,285.9	3,274.9	13.3	6.9	-171.48	147.6	306.5	987.8	12.12	81.995			
3,500.0	3,421.7	3,421.3	3,410.2	13.8	7.1	-171.59	148.2	311.6	1,013.8	12.53	80.924			
3,600.0	3,519.0	3,533.3	3,522.2	14.2	7.3	-171.80	148.2	311.7	1,036.9	12.88	80.477			
3,700.0	3,616.2	3,633.7	3,622.6	14.7	7.4	-171.99	148.0	311.3	1,059.4	13.22	80.125			
3,800.0	3,713.5	3,731.1	3,720.0	15.1	7.6	-172.16	147.7	310.8	1,081.9	13.56	79.811			
3,900.0	3,810.8	3,828.5	3,817.4	15.6	7.7	-172.34	147.4	310.3	1,104.4	13.89	79.512			
4,000.0	3,908.0	3,925.9	3,914.8	16.0	7.9	-172.50	147.1	309.7	1,126.9	14.22	79.227			
4,100.0	4,005.3	4,023.3	4,012.1	16.4	8.0	-172.66	146.8	309.2	1,149.4	14.56	78.955			
4,200.0	4,102.5	4,120.6	4,109.5	16.9	8.1	-172.81	146.5	308.7	1,171.9	14.89	78.695			
4,300.0	4,199.8	4,218.0	4,206.9	17.3	8.3	-172.96	146.2	308.2	1,194.4	15.23	78.446			
4,400.0	4,297.0	4,315.4	4,304.3	17.8	8.4	-173.10	145.9	307.7	1,216.9	15.56	78.207			

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 6-32D
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 6-32D	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	36.67	143.5	106.9	178.9					
100.0	100.0	100.0	100.0	0.1	0.1	36.67	143.5	106.9	178.9	178.7	0.27	657.158		
200.0	200.0	200.0	200.0	0.3	0.3	36.67	143.5	106.9	178.9	178.3	0.62	287.968 CC, ES		
300.0	300.0	294.1	294.1	0.5	0.5	176.89	144.5	108.0	182.3	181.3	0.96	189.879		
400.0	399.8	387.6	387.5	0.7	0.7	177.23	147.6	111.4	192.3	191.0	1.30	148.270		
500.0	499.5	485.2	484.9	0.9	0.9	177.68	152.3	116.5	207.9	206.3	1.64	126.878		
600.0	598.7	583.4	582.7	1.2	1.1	178.11	157.0	121.7	227.1	225.1	1.98	114.721		
700.0	697.5	680.8	679.9	1.5	1.3	178.49	161.7	126.9	249.6	247.3	2.32	107.807		
800.0	795.6	777.3	776.2	1.9	1.5	178.83	166.3	132.0	275.5	272.9	2.65	104.119		
900.0	893.1	873.0	871.6	2.3	1.7	179.12	170.9	137.0	304.7	301.7	2.98	102.387		
1,000.0	990.3	968.3	966.7	2.7	1.9	179.36	175.4	142.0	334.8	331.5	3.31	101.003		
1,100.0	1,087.6	1,063.7	1,061.9	3.1	2.1	179.57	180.0	147.1	364.9	361.2	3.65	99.881		
1,200.0	1,184.9	1,159.1	1,157.0	3.6	2.3	179.74	184.6	152.1	394.9	390.9	3.99	98.953		
1,300.0	1,282.1	1,254.4	1,252.1	4.0	2.5	179.89	189.1	157.1	425.0	420.7	4.33	98.173		
1,400.0	1,379.4	1,349.8	1,347.2	4.4	2.7	-179.98	193.7	162.2	455.1	450.4	4.67	97.508		
1,500.0	1,476.6	1,445.2	1,442.3	4.9	2.9	-179.86	198.3	167.2	485.2	480.2	5.01	96.933		
1,600.0	1,573.9	1,540.5	1,537.5	5.3	3.1	-179.76	202.8	172.3	515.2	509.9	5.34	96.432		
1,700.0	1,671.1	1,635.9	1,632.6	5.8	3.3	-179.67	207.4	177.3	545.3	539.6	5.68	95.991		
1,800.0	1,768.4	1,731.3	1,727.7	6.2	3.5	-179.59	212.0	182.3	575.4	569.4	6.02	95.599		
1,900.0	1,865.6	1,826.6	1,822.8	6.7	3.7	-179.52	216.6	187.4	605.5	599.1	6.36	95.250		
2,000.0	1,962.9	1,922.0	1,917.9	7.1	3.9	-179.45	221.1	192.4	635.6	628.9	6.69	94.936		
2,100.0	2,060.2	2,017.4	2,013.1	7.5	4.1	-179.39	225.7	197.4	665.7	658.6	7.03	94.652		
2,200.0	2,157.4	2,112.7	2,108.2	8.0	4.3	-179.34	230.3	202.5	695.7	688.4	7.37	94.394		
2,300.0	2,254.7	2,208.1	2,203.3	8.4	4.5	-179.29	234.8	207.5	725.8	718.1	7.71	94.159		
2,400.0	2,351.9	2,303.4	2,298.4	8.9	4.7	-179.24	239.4	212.5	755.9	747.9	8.05	93.944		
2,500.0	2,449.2	2,398.8	2,393.6	9.3	4.9	-179.20	244.0	217.6	786.0	777.6	8.38	93.746		
2,600.0	2,546.4	2,494.2	2,488.7	9.8	5.1	-179.16	248.5	222.6	816.1	807.4	8.72	93.564		
2,700.0	2,643.7	2,589.5	2,583.8	10.2	5.3	-179.13	253.1	227.7	846.2	837.1	9.06	93.395		
2,800.0	2,740.9	2,684.9	2,678.9	10.7	5.5	-179.09	257.7	232.7	876.3	866.9	9.40	93.238		
2,900.0	2,838.2	2,780.3	2,774.0	11.1	5.8	-179.06	262.3	237.7	906.4	896.6	9.74	93.092		
3,000.0	2,935.5	2,875.6	2,869.2	11.5	6.0	-179.03	266.8	242.8	936.4	926.4	10.07	92.956		
3,100.0	3,032.7	2,971.0	2,964.3	12.0	6.2	-179.00	271.4	247.8	966.5	956.1	10.41	92.828		
3,200.0	3,130.0	3,066.4	3,059.4	12.4	6.4	-178.98	276.0	252.8	996.6	985.9	10.75	92.709		
3,300.0	3,227.2	3,161.7	3,154.5	12.9	6.6	-178.95	280.5	257.9	1,026.7	1,015.6	11.09	92.597		
3,400.0	3,324.5	3,257.1	3,249.7	13.3	6.8	-178.93	285.1	262.9	1,056.8	1,045.4	11.43	92.491		
3,500.0	3,421.7	3,352.5	3,344.8	13.8	7.0	-178.91	289.7	267.9	1,086.9	1,075.1	11.76	92.392		
3,600.0	3,519.0	3,447.8	3,439.9	14.2	7.2	-178.89	294.2	273.0	1,117.0	1,104.9	12.10	92.298		
3,700.0	3,616.2	3,543.2	3,535.0	14.7	7.4	-178.87	298.8	278.0	1,147.1	1,134.6	12.44	92.209		
3,800.0	3,713.5	3,638.6	3,630.1	15.1	7.6	-178.85	303.4	283.1	1,177.2	1,164.4	12.78	92.125		
3,900.0	3,810.8	3,733.9	3,725.3	15.6	7.8	-178.83	307.9	288.1	1,207.3	1,194.1	13.12	92.045 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	36.65	131.5	97.8	163.9						
100.0	100.0	98.4	98.4	0.1	0.1	36.64	131.9	98.1	164.4	164.1	0.28	584.699			
200.0	200.0	196.0	196.0	0.3	0.3	36.57	133.3	98.9	166.0	165.4	0.62	269.498			
300.0	300.0	292.8	292.7	0.5	0.5	176.35	136.5	99.9	171.0	170.1	0.96	178.294			
400.0	399.8	386.8	386.6	0.7	0.7	175.63	142.2	101.0	181.8	180.5	1.30	139.693			
500.0	499.5	479.3	478.6	0.9	0.9	174.65	151.1	102.6	199.4	197.7	1.64	121.266			
600.0	598.7	575.4	574.0	1.2	1.2	173.42	163.0	104.1	222.5	220.5	2.00	111.216			
700.0	697.5	671.1	668.7	1.5	1.4	171.96	176.1	103.7	249.0	246.6	2.37	105.282			
800.0	795.6	765.1	761.8	1.9	1.7	170.69	189.6	102.8	279.4	276.6	2.72	102.573			
900.0	893.1	856.1	851.8	2.3	2.0	170.04	202.6	103.3	313.6	310.5	3.07	102.098			
1,000.0	990.3	949.2	943.9	2.7	2.3	169.73	216.1	104.8	349.2	345.8	3.44	101.544			
1,100.0	1,087.6	1,039.2	1,032.9	3.1	2.6	169.43	229.5	106.1	385.2	381.4	3.80	101.405			
1,200.0	1,184.9	1,129.5	1,122.1	3.6	2.9	169.22	243.6	108.0	422.1	417.9	4.17	101.327			
1,300.0	1,282.1	1,223.1	1,214.4	4.0	3.2	168.94	258.7	109.6	459.2	454.7	4.54	101.244			
1,400.0	1,379.4	1,322.9	1,313.1	4.4	3.5	168.79	273.8	111.6	495.7	490.8	4.92	100.781			
1,500.0	1,476.6	1,418.0	1,407.2	4.9	3.7	168.66	287.3	112.9	531.1	525.8	5.29	100.389			
1,600.0	1,573.9	1,510.9	1,499.1	5.3	4.0	168.60	300.2	114.6	566.5	560.8	5.66	100.174			
1,700.0	1,671.1	1,606.8	1,594.1	5.8	4.3	168.56	313.5	116.5	601.9	595.8	6.03	99.839			
1,800.0	1,768.4	1,705.3	1,691.8	6.2	4.6	168.49	326.8	117.8	636.6	630.2	6.41	99.347			
1,900.0	1,865.6	1,800.3	1,785.9	6.7	4.9	168.44	339.1	118.8	670.9	664.1	6.78	98.959			
2,000.0	1,962.9	1,895.5	1,880.3	7.1	5.1	168.42	351.2	120.2	705.1	697.9	7.15	98.636			
2,100.0	2,060.2	1,987.7	1,971.8	7.5	5.4	168.46	362.6	122.0	739.2	731.7	7.51	98.495			
2,200.0	2,157.4	2,079.4	2,062.8	8.0	5.6	168.53	373.9	124.5	773.7	765.8	7.86	98.423			
2,300.0	2,254.7	2,176.5	2,159.1	8.4	5.9	168.59	386.0	126.9	808.1	799.9	8.23	98.230			
2,400.0	2,351.9	2,273.5	2,255.3	8.9	6.2	168.63	397.8	128.9	842.1	833.5	8.60	97.973			
2,500.0	2,449.2	2,361.0	2,342.2	9.3	6.4	168.65	408.6	130.6	876.2	867.3	8.95	97.951			
2,600.0	2,546.4	2,446.9	2,427.3	9.8	6.7	168.67	419.8	132.8	911.2	901.9	9.30	98.015			
2,700.0	2,643.7	2,530.3	2,509.8	10.2	7.0	168.64	431.8	134.5	947.0	937.4	9.65	98.146			
2,800.0	2,740.9	2,616.8	2,595.3	10.7	7.2	168.57	445.3	136.3	984.0	973.9	10.01	98.313			
2,900.0	2,838.2	2,716.7	2,693.9	11.1	7.6	168.52	460.6	138.5	1,020.6	1,010.2	10.39	98.206			
3,000.0	2,935.5	2,812.8	2,789.0	11.5	7.9	168.44	475.1	139.9	1,056.8	1,046.0	10.78	98.065			
3,100.0	3,032.7	2,906.5	2,881.5	12.0	8.2	168.33	489.6	140.6	1,092.9	1,081.7	11.16	97.930			
3,200.0	3,130.0	3,009.4	2,983.2	12.4	8.5	168.20	505.3	141.0	1,128.8	1,117.2	11.56	97.619			
3,300.0	3,227.2	3,103.4	3,076.3	12.9	8.8	168.11	518.7	141.2	1,163.7	1,151.7	11.94	97.427 SF			
3,400.0	3,324.5	3,178.5	3,150.5	13.3	9.0	168.06	529.8	142.1	1,199.6	1,187.3	12.28	97.664			

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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 - Plan #1													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	36.65	131.5	97.8	163.9					
100.0	100.0	100.0	100.0	0.1	0.1	36.65	131.5	97.8	163.9	163.6	0.27	601.944		
200.0	200.0	200.0	200.0	0.3	0.3	36.65	131.5	97.8	163.9	163.3	0.62	263.774 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	176.79	131.5	97.8	165.6	164.7	0.97	170.752		
400.0	399.8	399.8	399.8	0.7	0.7	176.88	131.5	97.8	170.9	169.5	1.32	129.678		
500.0	499.5	499.5	499.5	0.9	0.8	177.02	131.5	97.8	179.6	177.9	1.66	107.956		
600.0	598.7	576.2	575.7	1.2	1.0	175.78	139.7	98.3	200.0	198.0	1.97	101.396		
700.0	697.5	672.3	670.9	1.5	1.2	174.15	152.9	98.9	226.9	224.6	2.32	97.751		
800.0	795.6	767.5	765.2	1.9	1.4	172.93	165.9	99.6	257.3	254.6	2.67	96.318		
900.0	893.1	861.6	858.4	2.3	1.7	172.06	178.7	100.2	290.9	287.9	3.02	96.191		
1,000.0	990.3	955.4	951.3	2.7	1.9	171.44	191.5	100.9	325.4	322.0	3.39	96.015		
1,100.0	1,087.6	1,049.2	1,044.3	3.1	2.2	170.94	204.3	101.5	359.9	356.2	3.76	95.819		
1,200.0	1,184.9	1,143.0	1,137.2	3.6	2.5	170.53	217.1	102.1	394.5	390.4	4.13	95.620		
1,300.0	1,282.1	1,236.8	1,230.1	4.0	2.7	170.19	229.9	102.8	429.1	424.6	4.50	95.427		
1,400.0	1,379.4	1,330.6	1,323.0	4.4	3.0	169.89	242.7	103.4	463.7	458.8	4.87	95.242		
1,500.0	1,476.6	1,424.4	1,416.0	4.9	3.3	169.64	255.5	104.1	498.3	493.0	5.24	95.068		
1,600.0	1,573.9	1,518.2	1,508.9	5.3	3.6	169.42	268.3	104.7	532.9	527.2	5.61	94.905		
1,700.0	1,671.1	1,612.0	1,601.8	5.8	3.8	169.23	281.1	105.4	567.5	561.5	5.99	94.752		
1,800.0	1,768.4	1,705.8	1,694.7	6.2	4.1	169.06	293.9	106.0	602.1	595.7	6.36	94.611		
1,900.0	1,865.6	1,799.6	1,787.7	6.7	4.4	168.91	306.7	106.7	636.7	630.0	6.74	94.478		
2,000.0	1,962.9	1,893.5	1,880.6	7.1	4.6	168.77	319.5	107.3	671.3	664.2	7.11	94.355		
2,100.0	2,060.2	1,987.3	1,973.5	7.5	4.9	168.65	332.3	107.9	705.9	698.5	7.49	94.240		
2,200.0	2,157.4	2,081.1	2,066.4	8.0	5.2	168.54	345.2	108.6	740.6	732.7	7.87	94.133		
2,300.0	2,254.7	2,174.9	2,159.3	8.4	5.5	168.43	358.0	109.2	775.2	767.0	8.24	94.033		
2,400.0	2,351.9	2,268.7	2,252.3	8.9	5.7	168.34	370.8	109.9	809.8	801.2	8.62	93.939		
2,500.0	2,449.2	2,362.5	2,345.2	9.3	6.0	168.26	383.6	110.5	844.5	835.5	9.00	93.851		
2,600.0	2,546.4	2,456.3	2,438.1	9.8	6.3	168.18	396.4	111.2	879.1	869.7	9.38	93.769		
2,700.0	2,643.7	2,550.1	2,531.0	10.2	6.6	168.11	409.2	111.8	913.7	904.0	9.75	93.691		
2,800.0	2,740.9	2,643.9	2,624.0	10.7	6.8	168.04	422.0	112.5	948.4	938.2	10.13	93.618		
2,900.0	2,838.2	2,737.7	2,716.9	11.1	7.1	167.98	434.8	113.1	983.0	972.5	10.51	93.549		
3,000.0	2,935.5	2,831.5	2,809.8	11.5	7.4	167.92	447.6	113.7	1,017.6	1,006.8	10.89	93.484		
3,100.0	3,032.7	2,925.3	2,902.7	12.0	7.7	167.86	460.4	114.4	1,052.3	1,041.0	11.26	93.422		
3,200.0	3,130.0	3,019.1	2,995.7	12.4	8.0	167.81	473.2	115.0	1,086.9	1,075.3	11.64	93.364		
3,300.0	3,227.2	3,112.9	3,088.6	12.9	8.2	167.76	486.0	115.7	1,121.6	1,109.5	12.02	93.309		
3,400.0	3,324.5	3,206.7	3,181.5	13.3	8.5	167.72	498.8	116.3	1,156.2	1,143.8	12.40	93.256		
3,500.0	3,421.7	3,300.5	3,274.4	13.8	8.8	167.68	511.6	117.0	1,190.8	1,178.1	12.78	93.206 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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 - 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 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)	Uncertainty Axis				
0.0	0.0	0.0	0.0	0.0	0.0	36.65	131.5	97.8	163.9						
100.0	100.0	100.0	100.0	0.1	0.1	36.65	131.5	97.8	163.9	163.6	0.27	601.944			
200.0	200.0	200.0	200.0	0.3	0.3	36.65	131.5	97.8	163.9	163.3	0.62	263.774 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	176.79	131.5	97.8	165.6	164.7	0.97	170.752			
400.0	399.8	399.8	399.8	0.7	0.7	176.88	131.5	97.8	170.9	169.5	1.32	129.678			
500.0	499.5	499.5	499.5	0.9	0.8	177.02	131.5	97.8	179.6	177.9	1.66	107.956			
600.0	598.7	593.2	593.2	1.2	1.0	176.97	133.0	98.1	193.1	191.1	2.00	96.702			
700.0	697.5	685.4	685.3	1.5	1.2	176.57	137.4	98.7	213.0	210.7	2.33	91.481			
800.0	795.6	775.6	775.2	1.9	1.4	175.95	144.6	99.8	239.0	236.3	2.66	89.962 SF			
900.0	893.1	863.4	862.4	2.3	1.6	175.22	154.2	101.3	270.9	267.9	2.99	90.711			
1,000.0	990.3	952.2	950.3	2.7	1.8	174.45	166.5	103.1	306.0	302.7	3.33	91.909			
1,100.0	1,087.6	1,045.5	1,042.7	3.1	2.0	173.76	179.9	105.2	341.7	338.0	3.69	92.732			
1,200.0	1,184.9	1,138.8	1,135.0	3.6	2.3	173.20	193.3	107.2	377.5	373.4	4.04	93.372			
1,300.0	1,282.1	1,232.2	1,227.4	4.0	2.6	172.74	206.7	109.2	413.2	408.8	4.40	93.877			
1,400.0	1,379.4	1,325.5	1,319.7	4.4	2.8	172.35	220.1	111.3	449.0	444.3	4.76	94.284			
1,500.0	1,476.6	1,418.8	1,412.0	4.9	3.1	172.02	233.5	113.3	484.8	479.7	5.12	94.617			
1,600.0	1,573.9	1,512.2	1,504.4	5.3	3.4	171.73	246.9	115.3	520.7	515.2	5.49	94.894			
1,700.0	1,671.1	1,605.5	1,596.7	5.8	3.7	171.48	260.3	117.4	556.5	550.6	5.85	95.127			
1,800.0	1,768.4	1,698.8	1,689.1	6.2	3.9	171.26	273.7	119.4	592.3	586.1	6.21	95.324			
1,900.0	1,865.6	1,792.2	1,781.4	6.7	4.2	171.07	287.1	121.4	628.2	621.6	6.58	95.494			
2,000.0	1,962.9	1,885.5	1,873.8	7.1	4.5	170.90	300.5	123.5	664.0	657.1	6.94	95.640			
2,100.0	2,060.2	1,978.9	1,966.1	7.5	4.8	170.74	314.0	125.5	699.9	692.6	7.31	95.768			
2,200.0	2,157.4	2,072.2	2,058.5	8.0	5.1	170.60	327.4	127.5	735.7	728.1	7.67	95.881			
2,300.0	2,254.7	2,165.5	2,150.8	8.4	5.3	170.48	340.8	129.6	771.6	763.6	8.04	95.980			
2,400.0	2,351.9	2,258.9	2,243.2	8.9	5.6	170.36	354.2	131.6	807.5	799.1	8.40	96.069			
2,500.0	2,449.2	2,352.2	2,335.5	9.3	5.9	170.25	367.6	133.6	843.3	834.6	8.77	96.148			
2,600.0	2,546.4	2,445.5	2,427.8	9.8	6.2	170.16	381.0	135.7	879.2	870.1	9.14	96.219			
2,700.0	2,643.7	2,538.9	2,520.2	10.2	6.5	170.07	394.4	137.7	915.1	905.6	9.50	96.283			
2,800.0	2,740.9	2,632.2	2,612.5	10.7	6.8	169.98	407.8	139.7	950.9	941.1	9.87	96.341			
2,900.0	2,838.2	2,725.5	2,704.9	11.1	7.0	169.91	421.2	141.7	986.8	976.6	10.24	96.394			
3,000.0	2,935.5	2,818.9	2,797.2	11.5	7.3	169.84	434.6	143.8	1,022.7	1,012.1	10.60	96.442			
3,100.0	3,032.7	2,912.2	2,889.6	12.0	7.6	169.77	448.0	145.8	1,058.6	1,047.6	10.97	96.487			
3,200.0	3,130.0	3,005.5	2,981.9	12.4	7.9	169.71	461.4	147.8	1,094.4	1,083.1	11.34	96.527			
3,300.0	3,227.2	3,098.9	3,074.3	12.9	8.2	169.65	474.8	149.9	1,130.3	1,118.6	11.71	96.565			
3,400.0	3,324.5	3,192.2	3,166.6	13.3	8.5	169.59	488.2	151.9	1,166.2	1,154.1	12.07	96.599			
3,500.0	3,421.7	3,285.6	3,259.0	13.8	8.8	169.54	501.6	153.9	1,202.1	1,189.6	12.44	96.631			

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	36.65	131.5	97.8	163.9					
100.0	100.0	100.0	100.0	0.1	0.1	36.65	131.5	97.8	163.9	163.6	0.27	601.944		
200.0	200.0	200.0	200.0	0.3	0.3	36.65	131.5	97.8	163.9	163.3	0.62	263.774 CC, ES		
300.0	300.0	295.2	295.2	0.5	0.5	176.51	133.1	98.0	167.1	166.1	0.96	173.578		
400.0	399.8	389.8	389.6	0.7	0.7	175.84	137.7	98.6	176.6	175.3	1.31	135.321		
500.0	499.5	483.1	482.7	0.9	0.9	174.86	145.4	99.5	192.5	190.9	1.65	116.697		
600.0	598.7	574.8	573.7	1.2	1.1	173.73	155.8	100.7	214.7	212.7	2.00	107.594		
700.0	697.5	664.2	662.2	1.5	1.4	172.57	168.8	102.2	243.0	240.6	2.34	103.852		
800.0	795.6	756.5	753.2	1.9	1.7	171.48	184.2	104.0	276.6	273.9	2.69	102.809		
900.0	893.1	849.4	844.8	2.3	2.0	170.70	199.8	105.9	313.5	310.4	3.05	102.928		
1,000.0	990.3	942.0	936.0	2.7	2.3	170.18	215.3	107.7	351.2	347.8	3.41	102.916		
1,100.0	1,087.6	1,034.6	1,027.2	3.1	2.6	169.76	230.8	109.5	388.9	385.2	3.78	102.865		
1,200.0	1,184.9	1,127.1	1,118.5	3.6	2.9	169.41	246.4	111.3	426.7	422.6	4.15	102.792		
1,300.0	1,282.1	1,219.7	1,209.7	4.0	3.2	169.12	261.9	113.2	464.5	460.0	4.52	102.708		
1,400.0	1,379.4	1,312.3	1,300.9	4.4	3.5	168.87	277.5	115.0	502.3	497.4	4.89	102.620		
1,500.0	1,476.6	1,404.8	1,392.2	4.9	3.8	168.66	293.0	116.8	540.1	534.8	5.27	102.530		
1,600.0	1,573.9	1,497.4	1,483.4	5.3	4.2	168.48	308.5	118.6	577.9	572.2	5.64	102.442		
1,700.0	1,671.1	1,590.0	1,574.6	5.8	4.5	168.32	324.1	120.5	615.7	609.7	6.01	102.357		
1,800.0	1,768.4	1,682.5	1,665.9	6.2	4.8	168.17	339.6	122.3	653.5	647.1	6.39	102.275		
1,900.0	1,865.6	1,775.1	1,757.1	6.7	5.1	168.04	355.1	124.1	691.3	684.5	6.76	102.197		
2,000.0	1,962.9	1,867.7	1,848.3	7.1	5.4	167.93	370.7	126.0	729.1	722.0	7.14	102.123		
2,100.0	2,060.2	1,960.2	1,939.6	7.5	5.7	167.83	386.2	127.8	766.9	759.4	7.51	102.053		
2,200.0	2,157.4	2,052.8	2,030.8	8.0	6.0	167.73	401.8	129.6	804.7	796.8	7.89	101.986		
2,300.0	2,254.7	2,145.4	2,122.0	8.4	6.4	167.65	417.3	131.4	842.5	834.3	8.27	101.923		
2,400.0	2,351.9	2,237.9	2,213.3	8.9	6.7	167.57	432.8	133.3	880.4	871.7	8.64	101.864		
2,500.0	2,449.2	2,330.5	2,304.5	9.3	7.0	167.50	448.4	135.1	918.2	909.2	9.02	101.807		
2,600.0	2,546.4	2,423.1	2,395.7	9.8	7.3	167.44	463.9	136.9	956.0	946.6	9.40	101.754		
2,700.0	2,643.7	2,515.6	2,487.0	10.2	7.6	167.37	479.5	138.7	993.8	984.1	9.77	101.703		
2,800.0	2,740.9	2,608.2	2,578.2	10.7	7.9	167.32	495.0	140.6	1,031.7	1,021.5	10.15	101.656		
2,900.0	2,838.2	2,700.7	2,669.4	11.1	8.3	167.27	510.5	142.4	1,069.5	1,059.0	10.53	101.610		
3,000.0	2,935.5	2,793.3	2,760.7	11.5	8.6	167.22	526.1	144.2	1,107.3	1,096.4	10.90	101.567		
3,100.0	3,032.7	2,885.9	2,851.9	12.0	8.9	167.17	541.6	146.0	1,145.1	1,133.9	11.28	101.526		
3,200.0	3,130.0	2,978.4	2,943.1	12.4	9.2	167.13	557.1	147.9	1,183.0	1,171.3	11.66	101.487		
3,300.0	3,227.2	3,071.0	3,034.4	12.9	9.5	167.09	572.7	149.7	1,220.8	1,208.8	12.03	101.450 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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 - Plan #4													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	36.65	131.5	97.8	163.9					
100.0	100.0	100.0	100.0	0.1	0.1	36.65	131.5	97.8	163.9	163.6	0.27	601.944		
200.0	200.0	200.0	200.0	0.3	0.3	36.65	131.5	97.8	163.9	163.3	0.62	263.774 CC, ES		
300.0	300.0	295.2	295.2	0.5	0.5	176.51	133.1	98.0	167.1	166.1	0.96	173.578		
400.0	399.8	389.8	389.6	0.7	0.7	175.84	137.7	98.6	176.6	175.3	1.31	135.321		
500.0	499.5	483.1	482.7	0.9	0.9	174.86	145.4	99.5	192.5	190.9	1.65	116.697		
600.0	598.7	574.8	573.7	1.2	1.1	173.73	155.8	100.7	214.7	212.7	2.00	107.594		
700.0	697.5	668.1	666.1	1.5	1.4	172.58	168.9	102.2	242.5	240.2	2.34	103.489		
800.0	795.6	762.9	759.9	1.9	1.6	171.70	182.4	103.8	274.0	271.3	2.69	101.707		
900.0	893.1	856.7	852.7	2.3	1.9	171.08	195.8	105.4	308.7	305.7	3.05	101.341		
1,000.0	990.3	950.1	945.2	2.7	2.2	170.69	209.1	107.0	344.2	340.8	3.41	100.967		
1,100.0	1,087.6	1,043.6	1,037.7	3.1	2.5	170.36	222.5	108.5	379.8	376.0	3.77	100.631		
1,200.0	1,184.9	1,137.0	1,130.2	3.6	2.8	170.09	235.8	110.1	415.4	411.2	4.14	100.329		
1,300.0	1,282.1	1,230.5	1,222.6	4.0	3.0	169.87	249.1	111.7	450.9	446.4	4.51	100.057		
1,400.0	1,379.4	1,323.9	1,315.1	4.4	3.3	169.68	262.5	113.2	486.5	481.6	4.87	99.813		
1,500.0	1,476.6	1,417.4	1,407.6	4.9	3.6	169.51	275.8	114.8	522.1	516.8	5.24	99.591		
1,600.0	1,573.9	1,510.8	1,500.1	5.3	3.9	169.36	289.2	116.4	557.6	552.0	5.61	99.391		
1,700.0	1,671.1	1,604.3	1,592.6	5.8	4.2	169.24	302.5	117.9	593.2	587.2	5.98	99.208		
1,800.0	1,768.4	1,697.7	1,685.0	6.2	4.5	169.12	315.8	119.5	628.8	622.5	6.35	99.041		
1,900.0	1,865.6	1,791.2	1,777.5	6.7	4.7	169.02	329.2	121.1	664.4	657.7	6.72	98.888		
2,000.0	1,962.9	1,884.6	1,870.0	7.1	5.0	168.93	342.5	122.6	700.0	692.9	7.09	98.747		
2,100.0	2,060.2	1,978.1	1,962.5	7.5	5.3	168.85	355.8	124.2	735.6	728.1	7.46	98.618		
2,200.0	2,157.4	2,071.5	2,054.9	8.0	5.6	168.77	369.2	125.8	771.2	763.3	7.83	98.498		
2,300.0	2,254.7	2,165.0	2,147.4	8.4	5.9	168.71	382.5	127.3	806.7	798.6	8.20	98.387		
2,400.0	2,351.9	2,258.4	2,239.9	8.9	6.2	168.64	395.9	128.9	842.3	833.8	8.57	98.284		
2,500.0	2,449.2	2,351.9	2,332.4	9.3	6.4	168.59	409.2	130.5	877.9	869.0	8.94	98.188		
2,600.0	2,546.4	2,445.3	2,424.9	9.8	6.7	168.53	422.5	132.0	913.5	904.2	9.31	98.099		
2,700.0	2,643.7	2,538.8	2,517.3	10.2	7.0	168.48	435.9	133.6	949.1	939.4	9.68	98.015		
2,800.0	2,740.9	2,632.2	2,609.8	10.7	7.3	168.44	449.2	135.2	984.7	974.7	10.05	97.936		
2,900.0	2,838.2	2,725.7	2,702.3	11.1	7.6	168.40	462.5	136.8	1,020.3	1,009.9	10.43	97.863		
3,000.0	2,935.5	2,819.1	2,794.8	11.5	7.9	168.36	475.9	138.3	1,055.9	1,045.1	10.80	97.793		
3,100.0	3,032.7	2,912.6	2,887.3	12.0	8.2	168.32	489.2	139.9	1,091.5	1,080.3	11.17	97.728		
3,200.0	3,130.0	3,006.0	2,979.7	12.4	8.4	168.29	502.6	141.5	1,127.1	1,115.6	11.54	97.666		
3,300.0	3,227.2	3,099.4	3,072.2	12.9	8.7	168.25	515.9	143.0	1,162.7	1,150.8	11.91	97.608		
3,400.0	3,324.5	3,192.9	3,164.7	13.3	9.0	168.22	529.2	144.6	1,198.3	1,186.0	12.28	97.553 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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 - Plan #5													Offset Site Error:	0.0 ft
Survey Program: 139-MWD, 4859-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	36.65	131.5	97.8	163.9					
100.0	100.0	98.4	98.4	0.1	0.1	36.64	131.9	98.1	164.4	0.28	584.699			
200.0	200.0	196.0	196.0	0.3	0.3	36.57	133.3	98.9	166.0	0.62	269.498			
300.0	300.0	292.8	292.7	0.5	0.5	176.35	136.5	99.9	171.0	0.96	178.294			
400.0	399.8	386.8	386.6	0.7	0.7	175.63	142.2	101.0	181.8	1.30	139.693			
500.0	499.5	479.3	478.6	0.9	0.9	174.65	151.1	102.6	199.4	1.64	121.266			
600.0	598.7	575.4	574.0	1.2	1.2	173.42	163.0	104.1	222.5	2.00	111.216			
700.0	697.5	671.1	668.7	1.5	1.4	171.96	176.1	103.7	249.0	2.37	105.282			
800.0	795.6	765.1	761.8	1.9	1.7	170.69	189.6	102.8	279.4	2.72	102.573			
900.0	893.1	856.1	851.8	2.3	2.0	170.04	202.6	103.3	313.6	3.07	102.098			
1,000.0	990.3	949.2	943.9	2.7	2.3	169.73	216.1	104.8	349.2	3.44	101.544			
1,100.0	1,087.6	1,039.2	1,032.9	3.1	2.6	169.43	229.5	106.1	385.2	3.80	101.405			
1,200.0	1,184.9	1,129.5	1,122.1	3.6	2.9	169.22	243.6	108.0	422.1	4.17	101.327			
1,300.0	1,282.1	1,223.1	1,214.4	4.0	3.2	168.94	258.7	109.6	459.2	4.54	101.244			
1,400.0	1,379.4	1,322.9	1,313.1	4.4	3.5	168.79	273.8	111.6	495.7	4.92	100.781			
1,500.0	1,476.6	1,418.0	1,407.2	4.9	3.7	168.66	287.3	112.9	531.1	5.29	100.389			
1,600.0	1,573.9	1,510.9	1,499.1	5.3	4.0	168.60	300.2	114.6	566.5	5.66	100.174			
1,700.0	1,671.1	1,606.8	1,594.1	5.8	4.3	168.56	313.5	116.5	601.9	6.03	99.839			
1,800.0	1,768.4	1,705.3	1,691.8	6.2	4.6	168.49	326.8	117.8	636.6	6.41	99.347			
1,900.0	1,865.6	1,800.3	1,785.9	6.7	4.9	168.44	339.1	118.8	670.9	6.78	98.959			
2,000.0	1,962.9	1,895.5	1,880.3	7.1	5.1	168.42	351.2	120.2	705.1	7.15	98.636			
2,100.0	2,060.2	1,987.7	1,971.8	7.5	5.4	168.46	362.6	122.0	739.2	7.51	98.495			
2,200.0	2,157.4	2,079.4	2,062.8	8.0	5.6	168.53	373.9	124.5	773.7	7.86	98.423			
2,300.0	2,254.7	2,176.5	2,159.1	8.4	5.9	168.59	386.0	126.9	808.1	8.23	98.230			
2,400.0	2,351.9	2,273.5	2,255.3	8.9	6.2	168.63	397.8	128.9	842.1	8.60	97.973			
2,500.0	2,449.2	2,361.0	2,342.2	9.3	6.4	168.65	408.6	130.6	876.2	8.95	97.951			
2,600.0	2,546.4	2,446.9	2,427.3	9.8	6.7	168.67	419.8	132.8	911.2	9.30	98.015			
2,700.0	2,643.7	2,530.3	2,509.8	10.2	7.0	168.64	431.8	134.5	947.0	9.65	98.146			
2,800.0	2,740.9	2,616.8	2,595.3	10.7	7.2	168.57	445.3	136.3	984.0	10.01	98.313			
2,900.0	2,838.2	2,716.7	2,693.9	11.1	7.6	168.52	460.6	138.5	1,020.6	10.39	98.206			
3,000.0	2,935.5	2,812.8	2,789.0	11.5	7.9	168.44	475.1	139.9	1,056.8	10.78	98.065			
3,100.0	3,032.7	2,906.5	2,881.5	12.0	8.2	168.33	489.6	140.6	1,092.9	11.16	97.930			
3,200.0	3,130.0	3,009.4	2,983.2	12.4	8.5	168.20	505.3	141.0	1,128.8	11.56	97.619			
3,300.0	3,227.2	3,103.4	3,076.3	12.9	8.8	168.11	518.7	141.2	1,163.7	11.94	97.427 SF			
3,400.0	3,324.5	3,178.5	3,150.5	13.3	9.0	168.06	529.8	142.1	1,199.6	12.28	97.664			

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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 - Plan #6													Offset Site Error:	0.0 ft
Survey Program: 139-MWD, 4859-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	36.65	131.5	97.8	163.9					
100.0	100.0	98.4	98.4	0.1	0.1	36.64	131.9	98.1	164.4	0.28	584.699			
200.0	200.0	196.0	196.0	0.3	0.3	36.57	133.3	98.9	166.0	0.62	269.498			
300.0	300.0	292.8	292.7	0.5	0.5	176.35	136.5	99.9	171.0	0.96	178.294			
400.0	399.8	386.8	386.6	0.7	0.7	175.63	142.2	101.0	181.8	1.30	139.693			
500.0	499.5	479.3	478.6	0.9	0.9	174.65	151.1	102.6	199.4	1.64	121.266			
600.0	598.7	575.4	574.0	1.2	1.2	173.42	163.0	104.1	222.5	2.00	111.216			
700.0	697.5	671.1	668.7	1.5	1.4	171.96	176.1	103.7	249.0	2.37	105.282			
800.0	795.6	765.1	761.8	1.9	1.7	170.69	189.6	102.8	279.4	2.72	102.573			
900.0	893.1	856.1	851.8	2.3	2.0	170.04	202.6	103.3	313.6	3.07	102.098			
1,000.0	990.3	949.2	943.9	2.7	2.3	169.73	216.1	104.8	349.2	3.44	101.544			
1,100.0	1,087.6	1,039.2	1,032.9	3.1	2.6	169.43	229.5	106.1	385.2	3.80	101.405			
1,200.0	1,184.9	1,129.5	1,122.1	3.6	2.9	169.22	243.6	108.0	422.1	4.17	101.327			
1,300.0	1,282.1	1,223.1	1,214.4	4.0	3.2	168.94	258.7	109.6	459.2	4.54	101.244			
1,400.0	1,379.4	1,322.9	1,313.1	4.4	3.5	168.79	273.8	111.6	495.7	4.92	100.781			
1,500.0	1,476.6	1,418.0	1,407.2	4.9	3.7	168.66	287.3	112.9	531.1	5.29	100.389			
1,600.0	1,573.9	1,510.9	1,499.1	5.3	4.0	168.60	300.2	114.6	566.5	5.66	100.174			
1,700.0	1,671.1	1,606.8	1,594.1	5.8	4.3	168.56	313.5	116.5	601.9	6.03	99.839			
1,800.0	1,768.4	1,705.3	1,691.8	6.2	4.6	168.49	326.8	117.8	636.6	6.41	99.347			
1,900.0	1,865.6	1,800.3	1,785.9	6.7	4.9	168.44	339.1	118.8	670.9	6.78	98.959			
2,000.0	1,962.9	1,895.5	1,880.3	7.1	5.1	168.42	351.2	120.2	705.1	7.15	98.636			
2,100.0	2,060.2	1,987.7	1,971.8	7.5	5.4	168.46	362.6	122.0	739.2	7.51	98.495			
2,200.0	2,157.4	2,079.4	2,062.8	8.0	5.6	168.53	373.9	124.5	773.7	7.86	98.423			
2,300.0	2,254.7	2,176.5	2,159.1	8.4	5.9	168.59	386.0	126.9	808.1	8.23	98.230			
2,400.0	2,351.9	2,273.5	2,255.3	8.9	6.2	168.63	397.8	128.9	842.1	8.60	97.973			
2,500.0	2,449.2	2,361.0	2,342.2	9.3	6.4	168.65	408.6	130.6	876.2	8.95	97.951			
2,600.0	2,546.4	2,446.9	2,427.3	9.8	6.7	168.67	419.8	132.8	911.2	9.30	98.015			
2,700.0	2,643.7	2,530.3	2,509.8	10.2	7.0	168.64	431.8	134.5	947.0	9.65	98.146			
2,800.0	2,740.9	2,616.8	2,595.3	10.7	7.2	168.57	445.3	136.3	984.0	10.01	98.313			
2,900.0	2,838.2	2,716.7	2,693.9	11.1	7.6	168.52	460.6	138.5	1,020.6	10.39	98.206			
3,000.0	2,935.5	2,812.8	2,789.0	11.5	7.9	168.44	475.1	139.9	1,056.8	10.78	98.065			
3,100.0	3,032.7	2,906.5	2,881.5	12.0	8.2	168.33	489.6	140.6	1,092.9	11.16	97.930			
3,200.0	3,130.0	3,009.4	2,983.2	12.4	8.5	168.20	505.3	141.0	1,128.8	11.56	97.619			
3,300.0	3,227.2	3,103.4	3,076.3	12.9	8.8	168.11	518.7	141.2	1,163.7	11.94	97.427 SF			
3,400.0	3,324.5	3,178.5	3,150.5	13.3	9.0	168.06	529.8	142.1	1,199.6	12.28	97.664			

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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	36.02	12.0	8.7	14.9					
100.0	100.0	100.0	100.0	0.1	0.1	36.02	12.0	8.7	14.9	14.6	0.27	54.586		
200.0	200.0	200.0	200.0	0.3	0.3	36.02	12.0	8.7	14.9	14.2	0.62	23.920 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	176.53	12.0	8.7	16.6	15.6	0.97	17.117		
400.0	399.8	400.5	400.5	0.7	0.7	176.25	10.9	7.4	20.1	18.8	1.32	15.256		
500.0	499.5	501.2	501.1	0.9	0.9	174.57	7.5	3.3	23.7	22.1	1.67	14.217		
600.0	598.7	602.0	601.4	1.2	1.1	172.04	1.8	-3.4	27.5	25.4	2.02	13.563		
700.0	697.5	702.9	701.6	1.5	1.3	169.01	-6.2	-12.9	31.4	29.0	2.39	13.098		
800.0	795.6	803.9	801.3	1.9	1.7	165.68	-16.4	-25.1	35.5	32.7	2.80	12.697		
900.0	893.1	904.6	900.2	2.3	2.0	162.24	-28.8	-39.9	39.9	36.6	3.25	12.277		
1,000.0	990.3	1,004.5	998.0	2.7	2.4	159.31	-41.6	-55.2	44.4	40.7	3.75	11.843		
1,100.0	1,087.6	1,104.4	1,095.9	3.1	2.7	156.94	-54.5	-70.6	49.1	44.8	4.29	11.444		
1,200.0	1,184.9	1,204.3	1,193.7	3.6	3.1	154.97	-67.4	-86.0	53.8	48.9	4.85	11.087		
1,300.0	1,282.1	1,304.1	1,291.5	4.0	3.5	153.32	-80.3	-101.3	58.5	53.1	5.43	10.775		
1,400.0	1,379.4	1,404.0	1,389.4	4.4	3.9	151.92	-93.1	-116.7	63.3	57.3	6.03	10.501		
1,500.0	1,476.6	1,503.9	1,487.2	4.9	4.3	150.72	-106.0	-132.0	68.2	61.5	6.64	10.263		
1,600.0	1,573.9	1,603.7	1,585.1	5.3	4.7	149.68	-118.9	-147.4	73.0	65.8	7.26	10.055		
1,700.0	1,671.1	1,703.6	1,682.9	5.8	5.1	148.77	-131.8	-162.8	77.9	70.0	7.89	9.873		
1,800.0	1,768.4	1,803.5	1,780.8	6.2	5.4	147.97	-144.7	-178.1	82.8	74.3	8.52	9.712		
1,900.0	1,865.6	1,903.4	1,878.6	6.7	5.8	147.25	-157.5	-193.5	87.7	78.5	9.16	9.570		
2,000.0	1,962.9	2,003.2	1,976.4	7.1	6.2	146.61	-170.4	-208.8	92.6	82.8	9.81	9.443		
2,100.0	2,060.2	2,103.1	2,074.3	7.5	6.6	146.04	-183.3	-224.2	97.6	87.1	10.46	9.330		
2,200.0	2,157.4	2,203.0	2,172.1	8.0	7.0	145.52	-196.2	-239.6	102.5	91.4	11.11	9.229		
2,300.0	2,254.7	2,302.9	2,270.0	8.4	7.4	145.05	-209.1	-254.9	107.5	95.7	11.76	9.137		
2,400.0	2,351.9	2,402.7	2,367.8	8.9	7.8	144.62	-221.9	-270.3	112.4	100.0	12.41	9.054		
2,500.0	2,449.2	2,502.6	2,465.6	9.3	8.2	144.23	-234.8	-285.6	117.4	104.3	13.07	8.979		
2,600.0	2,546.4	2,602.5	2,563.5	9.8	8.6	143.87	-247.7	-301.0	122.3	108.6	13.73	8.910		
2,700.0	2,643.7	2,702.4	2,661.3	10.2	9.0	143.53	-260.6	-316.4	127.3	112.9	14.39	8.847		
2,800.0	2,740.9	2,802.2	2,759.2	10.7	9.4	143.22	-273.5	-331.7	132.3	117.2	15.05	8.789		
2,900.0	2,838.2	2,902.1	2,857.0	11.1	9.8	142.94	-286.3	-347.1	137.3	121.5	15.71	8.735		
3,000.0	2,935.5	3,002.0	2,954.8	11.5	10.2	142.67	-299.2	-362.4	142.2	125.9	16.38	8.686		
3,100.0	3,032.7	3,101.9	3,052.7	12.0	10.5	142.43	-312.1	-377.8	147.2	130.2	17.04	8.640		
3,200.0	3,130.0	3,201.7	3,150.5	12.4	10.9	142.19	-325.0	-393.2	152.2	134.5	17.71	8.597		
3,300.0	3,227.2	3,301.6	3,248.4	12.9	11.3	141.98	-337.9	-408.5	157.2	138.8	18.37	8.557		
3,400.0	3,324.5	3,401.5	3,346.2	13.3	11.7	141.77	-350.7	-423.9	162.2	143.2	19.04	8.520		
3,500.0	3,421.7	3,501.3	3,444.1	13.8	12.1	141.58	-363.6	-439.2	167.2	147.5	19.70	8.485		
3,600.0	3,519.0	3,601.2	3,541.9	14.2	12.5	141.40	-376.5	-454.6	172.2	151.8	20.37	8.453		
3,700.0	3,616.2	3,701.1	3,639.7	14.7	12.9	141.23	-389.4	-470.0	177.2	156.1	21.04	8.422		
3,800.0	3,713.5	3,801.0	3,737.6	15.1	13.3	141.07	-402.3	-485.3	182.2	160.5	21.70	8.393		
3,900.0	3,810.8	3,900.8	3,835.4	15.6	13.7	140.92	-415.1	-500.7	187.2	164.8	22.37	8.366		
4,000.0	3,908.0	4,000.7	3,933.3	16.0	14.1	140.78	-428.0	-516.0	192.2	169.1	23.04	8.341		
4,100.0	4,005.3	4,100.6	4,031.1	16.4	14.5	140.64	-440.9	-531.4	197.2	173.5	23.71	8.316		
4,200.0	4,102.5	4,200.5	4,128.9	16.9	14.9	140.51	-453.8	-546.8	202.2	177.8	24.38	8.293		
4,300.0	4,199.8	4,300.3	4,226.8	17.3	15.3	140.38	-466.6	-562.1	207.2	182.1	25.05	8.271		
4,400.0	4,297.0	4,400.2	4,324.6	17.8	15.7	140.27	-479.5	-577.5	212.2	186.5	25.72	8.251		
4,500.0	4,394.3	4,500.1	4,422.5	18.2	16.1	140.15	-492.4	-592.8	217.2	190.8	26.39	8.231		
4,600.0	4,491.6	4,600.0	4,520.3	18.7	16.5	140.05	-505.3	-608.2	222.2	195.1	27.06	8.212		
4,700.0	4,588.8	4,699.8	4,618.2	19.1	16.8	139.94	-518.2	-623.6	227.2	199.5	27.73	8.194		
4,800.0	4,686.1	4,799.7	4,716.0	19.6	17.2	139.85	-531.0	-638.9	232.2	203.8	28.40	8.177		
4,900.0	4,783.3	4,899.6	4,813.8	20.0	17.6	139.75	-543.9	-654.3	237.2	208.2	29.07	8.161		
5,000.0	4,880.6	4,999.5	4,911.7	20.5	18.0	139.66	-556.8	-669.6	242.2	212.5	29.74	8.145		
5,100.0	4,977.8	5,099.3	5,009.5	20.9	18.4	139.57	-569.7	-685.0	247.2	216.8	30.41	8.130		

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 6-32D
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 6-32D	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 6-33D - DD - Plan #2												Offset Well Error:	0.0 ft
Survey Program: O-MWD													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,075.1	5,199.2	5,107.4	21.4	18.8	139.49	-582.6	-700.4	252.3	221.2	31.08	8.116	
5,300.0	5,172.3	5,299.1	5,205.2	21.8	19.2	139.41	-595.4	-715.7	257.3	225.5	31.75	8.102	
5,400.0	5,269.6	5,399.0	5,303.0	22.2	19.6	139.33	-608.3	-731.1	262.3	229.9	32.42	8.089	
5,500.0	5,366.9	5,498.8	5,400.9	22.7	20.0	139.26	-621.2	-746.5	267.3	234.2	33.09	8.077	
5,600.0	5,464.1	5,598.7	5,498.7	23.1	20.4	139.19	-634.1	-761.8	272.3	238.5	33.77	8.064	
5,700.0	5,561.4	5,698.6	5,596.6	23.6	20.8	139.12	-647.0	-777.2	277.3	242.9	34.44	8.053	
5,800.0	5,658.6	5,798.4	5,694.4	24.0	21.2	139.05	-659.8	-792.5	282.3	247.2	35.11	8.042	
5,900.0	5,755.9	5,898.3	5,792.3	24.5	21.6	138.99	-672.7	-807.9	287.3	251.6	35.78	8.031	
6,000.0	5,853.1	5,998.2	5,890.1	24.9	22.0	138.93	-685.6	-823.3	292.4	255.9	36.45	8.020	
6,100.0	5,950.4	6,098.1	5,987.9	25.4	22.4	138.87	-698.5	-838.6	297.4	260.2	37.12	8.010	
6,200.0	6,047.6	6,197.9	6,085.8	25.8	22.8	138.81	-711.4	-854.0	302.4	264.6	37.80	8.000	
6,300.0	6,144.9	6,297.8	6,183.6	26.3	23.2	138.76	-724.2	-869.3	307.4	268.9	38.47	7.991	
6,400.0	6,242.2	6,397.7	6,281.5	26.7	23.5	138.70	-737.1	-884.7	312.4	273.3	39.14	7.982	
6,500.0	6,339.4	6,497.6	6,379.3	27.1	23.9	138.65	-750.0	-900.1	317.4	277.6	39.81	7.973	
6,600.0	6,436.7	6,597.4	6,477.1	27.6	24.3	138.60	-762.9	-915.4	322.4	282.0	40.48	7.965	
6,700.0	6,533.9	6,697.3	6,575.0	28.0	24.7	138.55	-775.8	-930.8	327.5	286.3	41.16	7.957	
6,800.0	6,631.6	6,794.6	6,670.3	28.4	25.1	138.39	-788.1	-945.6	331.3	289.4	41.86	7.915	
6,900.0	6,729.9	6,887.8	6,762.1	28.8	25.4	138.19	-798.5	-957.8	334.2	291.7	42.48	7.867	
7,000.0	6,828.8	6,981.0	6,854.5	29.0	25.7	138.02	-806.8	-967.8	336.5	293.5	43.01	7.823	
7,100.0	6,928.2	7,074.3	6,947.2	29.3	25.9	137.89	-813.3	-975.5	338.2	294.7	43.45	7.784	
7,200.0	7,027.9	7,167.5	7,040.1	29.4	26.0	137.78	-817.8	-980.9	339.3	295.5	43.80	7.747	
7,300.0	7,127.8	7,260.8	7,133.3	29.5	26.1	137.70	-820.3	-983.9	339.8	295.8	44.05	7.714	
7,400.0	7,227.8	7,355.4	7,227.9	29.6	26.2	117.52	-821.0	-984.7	339.8	295.6	44.26	7.679	
7,500.0	7,327.8	7,456.1	7,328.6	29.7	26.3	117.52	-821.1	-985.0	339.9	295.4	44.47	7.642	
7,600.0	7,427.8	7,556.8	7,429.3	29.8	26.4	117.53	-821.5	-985.6	339.9	295.2	44.70	7.603	
7,700.0	7,527.8	7,657.5	7,530.0	29.9	26.5	117.53	-822.1	-986.7	339.9	294.9	44.95	7.562	
7,800.0	7,627.8	7,757.7	7,630.2	30.0	26.6	117.54	-822.9	-988.0	339.9	294.7	45.19	7.521	
7,900.0	7,727.8	7,857.7	7,730.2	30.1	26.8	117.54	-823.7	-989.3	339.9	294.4	45.44	7.480	
8,000.0	7,827.8	7,957.7	7,830.2	30.2	26.9	117.54	-824.4	-990.7	339.9	294.2	45.69	7.439	
8,100.0	7,927.7	8,057.7	7,930.2	30.3	27.0	117.54	-825.2	-992.0	339.9	293.9	45.94	7.398	
8,200.0	8,027.7	8,157.7	8,030.2	30.4	27.1	117.54	-826.0	-993.4	339.9	293.7	46.19	7.358	
8,300.0	8,127.7	8,257.7	8,130.2	30.5	27.2	117.54	-826.8	-994.7	339.9	293.4	46.45	7.318	
8,400.0	8,227.7	8,357.7	8,230.2	30.6	27.3	117.54	-827.5	-996.1	339.9	293.2	46.70	7.278	
8,500.0	8,327.7	8,457.7	8,330.1	30.7	27.4	117.54	-828.3	-997.4	339.9	292.9	46.96	7.238	
8,600.0	8,427.7	8,557.7	8,430.1	30.8	27.6	117.54	-829.1	-998.7	339.9	292.7	47.21	7.199	
8,700.0	8,527.7	8,657.7	8,530.1	30.9	27.7	117.54	-829.9	-1,000.1	339.9	292.4	47.47	7.159	
8,800.0	8,627.7	8,757.7	8,630.1	31.0	27.8	117.54	-830.7	-1,001.4	339.9	292.1	47.73	7.121	
8,900.0	8,727.6	8,857.7	8,730.1	31.2	27.9	117.54	-831.4	-1,002.8	339.9	291.9	47.99	7.082	
9,000.0	8,827.6	8,957.7	8,830.1	31.3	28.0	117.54	-832.2	-1,004.1	339.9	291.6	48.25	7.043	
9,100.0	8,927.6	9,057.7	8,930.1	31.4	28.1	117.55	-833.0	-1,005.5	339.9	291.3	48.52	7.005	
9,200.0	9,027.6	9,157.7	9,030.1	31.5	28.3	117.55	-833.8	-1,006.8	339.9	291.1	48.78	6.967	
9,300.0	9,127.6	9,257.7	9,130.0	31.6	28.4	117.55	-834.6	-1,008.2	339.9	290.8	49.05	6.930	
9,400.0	9,227.6	9,357.7	9,230.0	31.7	28.5	117.55	-835.3	-1,009.5	339.9	290.5	49.31	6.892	
9,500.0	9,327.6	9,457.7	9,330.0	31.8	28.6	117.55	-836.1	-1,010.9	339.9	290.3	49.58	6.855	
9,600.0	9,427.6	9,557.7	9,430.0	31.9	28.7	117.55	-836.9	-1,012.2	339.9	290.0	49.85	6.818	
9,700.0	9,527.5	9,657.7	9,530.0	32.0	28.9	117.55	-837.7	-1,013.5	339.9	289.7	50.12	6.781	
9,800.0	9,627.5	9,757.7	9,630.0	32.2	29.0	117.55	-838.5	-1,014.9	339.9	289.5	50.39	6.745	
9,900.0	9,727.5	9,857.7	9,730.0	32.3	29.1	117.55	-839.2	-1,016.2	339.8	289.2	50.66	6.709	
10,000.0	9,827.5	9,957.7	9,830.0	32.4	29.2	117.55	-840.0	-1,017.6	339.8	288.9	50.93	6.673	
10,100.0	9,927.5	10,057.7	9,930.0	32.5	29.4	117.55	-840.8	-1,018.9	339.8	288.6	51.20	6.637	
10,121.5	9,949.0	10,079.2	9,951.5	32.5	29.4	117.55	-841.0	-1,019.2	339.8	288.6	51.26	6.629 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 6-32D
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 6-32D	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	36.46	24.0	17.8	29.9				
100.0	100.0	100.0	100.0	0.1	0.1	36.46	24.0	17.8	29.9	29.6	0.27	109.784	
200.0	200.0	200.0	200.0	0.3	0.3	36.46	24.0	17.8	29.9	29.3	0.62	48.108 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	176.75	24.0	17.8	31.6	30.7	0.97	32.610	
400.0	399.8	399.8	399.8	0.7	0.7	177.21	24.0	17.8	36.9	35.5	1.32	27.976	
500.0	499.5	499.5	499.5	0.9	0.8	177.73	24.0	17.8	45.6	43.9	1.66	27.397	
600.0	598.7	600.5	600.5	1.2	1.0	177.49	23.2	16.2	56.2	54.2	2.01	27.940	
700.0	697.5	701.9	701.7	1.5	1.2	176.20	20.7	11.5	67.0	64.7	2.36	28.418	
800.0	795.6	803.5	803.0	1.9	1.4	174.30	16.4	3.6	78.2	75.5	2.72	28.815	
900.0	893.1	905.5	904.1	2.3	1.7	172.03	10.4	-7.4	89.7	86.6	3.09	29.012	
1,000.0	990.3	1,007.8	1,005.2	2.7	2.0	169.30	2.7	-21.7	99.2	95.7	3.52	28.220	
1,100.0	1,087.6	1,108.6	1,104.2	3.1	2.3	166.19	-6.4	-38.3	106.4	102.5	3.98	26.710	
1,200.0	1,184.9	1,208.2	1,202.0	3.6	2.6	163.42	-15.4	-55.0	113.7	109.2	4.49	25.313	
1,300.0	1,282.1	1,307.8	1,299.7	4.0	3.0	160.99	-24.4	-71.7	121.2	116.2	5.03	24.075	
1,400.0	1,379.4	1,407.4	1,397.5	4.4	3.3	158.85	-33.5	-88.4	128.9	123.3	5.61	22.989	
1,500.0	1,476.6	1,507.0	1,495.3	4.9	3.7	156.95	-42.5	-105.1	136.8	130.6	6.21	22.039	
1,600.0	1,573.9	1,606.6	1,593.0	5.3	4.1	155.26	-51.6	-121.8	144.7	137.9	6.82	21.212	
1,700.0	1,671.1	1,706.2	1,690.8	5.8	4.4	153.74	-60.6	-138.5	152.8	145.4	7.46	20.490	
1,800.0	1,768.4	1,805.8	1,788.6	6.2	4.8	152.38	-69.6	-155.2	161.0	152.9	8.11	19.860	
1,900.0	1,865.6	1,905.4	1,886.3	6.7	5.2	151.15	-78.7	-171.9	169.3	160.5	8.77	19.306	
2,000.0	1,962.9	2,005.0	1,984.1	7.1	5.5	150.04	-87.7	-188.6	177.7	168.2	9.44	18.819	
2,100.0	2,060.2	2,104.6	2,081.9	7.5	5.9	149.02	-96.8	-205.3	186.1	175.9	10.12	18.388	
2,200.0	2,157.4	2,204.2	2,179.6	8.0	6.3	148.10	-105.8	-222.0	194.5	183.7	10.80	18.005	
2,300.0	2,254.7	2,303.8	2,277.4	8.4	6.6	147.25	-114.8	-238.7	203.0	191.5	11.49	17.663	
2,400.0	2,351.9	2,403.4	2,375.2	8.9	7.0	146.47	-123.9	-255.4	211.6	199.4	12.19	17.357	
2,500.0	2,449.2	2,503.0	2,472.9	9.3	7.4	145.75	-132.9	-272.1	220.2	207.3	12.89	17.081	
2,600.0	2,546.4	2,602.6	2,570.7	9.8	7.8	145.08	-142.0	-288.8	228.8	215.2	13.59	16.832	
2,700.0	2,643.7	2,702.2	2,668.5	10.2	8.1	144.46	-151.0	-305.4	237.4	223.1	14.30	16.606	
2,800.0	2,740.9	2,801.7	2,766.3	10.7	8.5	143.89	-160.1	-322.1	246.1	231.1	15.01	16.400	
2,900.0	2,838.2	2,901.3	2,864.0	11.1	8.9	143.36	-169.1	-338.8	254.8	239.1	15.72	16.212	
3,000.0	2,935.5	3,000.9	2,961.8	11.5	9.3	142.86	-178.1	-355.5	263.5	247.1	16.43	16.040	
3,100.0	3,032.7	3,100.5	3,059.6	12.0	9.6	142.39	-187.2	-372.2	272.2	255.1	17.14	15.881	
3,200.0	3,130.0	3,200.1	3,157.3	12.4	10.0	141.95	-196.2	-388.9	281.0	263.1	17.86	15.735	
3,300.0	3,227.2	3,299.7	3,255.1	12.9	10.4	141.54	-205.3	-405.6	289.7	271.2	18.57	15.600	
3,400.0	3,324.5	3,399.3	3,352.9	13.3	10.8	141.15	-214.3	-422.3	298.5	279.2	19.29	15.475	
3,500.0	3,421.7	3,498.9	3,450.6	13.8	11.1	140.79	-223.3	-439.0	307.3	287.3	20.01	15.359	
3,600.0	3,519.0	3,598.5	3,548.4	14.2	11.5	140.44	-232.4	-455.7	316.1	295.4	20.73	15.250	
3,700.0	3,616.2	3,698.1	3,646.2	14.7	11.9	140.11	-241.4	-472.4	324.9	303.5	21.45	15.149	
3,800.0	3,713.5	3,797.7	3,743.9	15.1	12.3	139.80	-250.5	-489.1	333.7	311.6	22.17	15.054	
3,900.0	3,810.8	3,897.3	3,841.7	15.6	12.6	139.51	-259.5	-505.8	342.6	319.7	22.89	14.966	
4,000.0	3,908.0	3,996.9	3,939.5	16.0	13.0	139.23	-268.6	-522.5	351.4	327.8	23.61	14.882	
4,100.0	4,005.3	4,096.5	4,037.2	16.4	13.4	138.97	-277.6	-539.2	360.3	335.9	24.34	14.804	
4,200.0	4,102.5	4,196.1	4,135.0	16.9	13.8	138.71	-286.6	-555.9	369.1	344.1	25.06	14.730	
4,300.0	4,199.8	4,295.7	4,232.8	17.3	14.2	138.47	-295.7	-572.5	378.0	352.2	25.78	14.661	
4,400.0	4,297.0	4,395.3	4,330.5	17.8	14.5	138.24	-304.7	-589.2	386.8	360.3	26.51	14.595	
4,500.0	4,394.3	4,494.8	4,428.3	18.2	14.9	138.03	-313.8	-605.9	395.7	368.5	27.23	14.533	
4,600.0	4,491.6	4,594.4	4,526.1	18.7	15.3	137.82	-322.8	-622.6	404.6	376.6	27.95	14.474	
4,700.0	4,588.8	4,694.0	4,623.8	19.1	15.7	137.62	-331.8	-639.3	413.5	384.8	28.68	14.418	
4,800.0	4,686.1	4,793.6	4,721.6	19.6	16.0	137.42	-340.9	-656.0	422.4	393.0	29.40	14.364	
4,900.0	4,783.3	4,893.2	4,819.4	20.0	16.4	137.24	-349.9	-672.7	431.3	401.1	30.13	14.314	
5,000.0	4,880.6	4,992.8	4,917.1	20.5	16.8	137.06	-359.0	-689.4	440.2	409.3	30.86	14.266	
5,100.0	4,977.8	5,092.4	5,014.9	20.9	17.2	136.89	-368.0	-706.1	449.1	417.5	31.58	14.220	

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 6-32D
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 6-32D	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: 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			
5,200.0	5,075.1	5,192.0	5,112.7	21.4	17.6	136.73	-377.1	-722.8	458.0	425.7	32.31	14.176		
5,300.0	5,172.3	5,291.6	5,210.5	21.8	17.9	136.57	-386.1	-739.5	466.9	433.9	33.03	14.134		
5,400.0	5,269.6	5,391.2	5,308.2	22.2	18.3	136.42	-395.1	-756.2	475.8	442.0	33.76	14.094		
5,500.0	5,366.9	5,490.8	5,406.0	22.7	18.7	136.28	-404.2	-772.9	484.7	450.2	34.49	14.056		
5,600.0	5,464.1	5,590.4	5,503.8	23.1	19.1	136.14	-413.2	-789.6	493.6	458.4	35.21	14.019		
5,700.0	5,561.4	5,690.0	5,601.5	23.6	19.4	136.00	-422.3	-806.3	502.6	466.6	35.94	13.984		
5,800.0	5,658.6	5,789.6	5,699.3	24.0	19.8	135.87	-431.3	-823.0	511.5	474.8	36.67	13.950		
5,900.0	5,755.9	5,889.2	5,797.1	24.5	20.2	135.74	-440.3	-839.6	520.4	483.0	37.39	13.917		
6,000.0	5,853.1	5,988.8	5,894.8	24.9	20.6	135.62	-449.4	-856.3	529.3	491.2	38.12	13.886		
6,100.0	5,950.4	6,088.4	5,992.6	25.4	21.0	135.50	-458.4	-873.0	538.3	499.4	38.85	13.856		
6,200.0	6,047.6	6,188.0	6,090.4	25.8	21.3	135.39	-467.5	-889.7	547.2	507.6	39.57	13.827		
6,300.0	6,144.9	6,287.5	6,188.1	26.3	21.7	135.28	-476.5	-906.4	556.1	515.8	40.30	13.800		
6,400.0	6,242.2	6,387.1	6,285.9	26.7	22.1	135.17	-485.6	-923.1	565.1	524.1	41.03	13.773		
6,500.0	6,339.4	6,486.7	6,383.7	27.1	22.5	135.07	-494.6	-939.8	574.0	532.3	41.76	13.747		
6,600.0	6,436.7	6,586.3	6,481.4	27.6	22.8	134.97	-503.6	-956.5	583.0	540.5	42.48	13.722		
6,700.0	6,533.9	6,685.9	6,579.2	28.0	23.2	134.88	-512.7	-973.2	591.9	548.7	43.21	13.698		
6,800.0	6,631.6	6,785.3	6,676.7	28.4	23.6	134.77	-521.7	-989.8	599.6	555.6	43.95	13.643		
6,900.0	6,729.9	6,877.4	6,767.4	28.8	23.9	134.58	-529.3	-1,003.9	605.5	560.9	44.60	13.577		
7,000.0	6,828.8	6,969.6	6,858.7	29.0	24.1	134.42	-535.5	-1,015.4	610.3	565.1	45.16	13.515		
7,100.0	6,928.2	7,061.9	6,950.4	29.3	24.4	134.29	-540.4	-1,024.3	613.9	568.3	45.61	13.458		
7,200.0	7,027.9	7,154.2	7,042.5	29.4	24.5	134.18	-543.8	-1,030.6	616.3	570.3	45.98	13.404		
7,300.0	7,127.8	7,246.6	7,134.7	29.5	24.6	134.10	-545.8	-1,034.3	617.5	571.2	46.24	13.353		
7,400.0	7,227.8	7,339.7	7,227.9	29.6	24.7	113.90	-546.4	-1,035.4	617.6	571.2	46.44	13.298		
7,500.0	7,327.8	7,440.8	7,329.0	29.7	24.8	113.91	-546.5	-1,035.6	617.6	571.0	46.65	13.240		
7,600.0	7,427.8	7,541.9	7,430.1	29.8	24.9	113.92	-546.8	-1,036.2	617.7	570.8	46.87	13.178		
7,700.0	7,527.8	7,643.0	7,531.2	29.9	25.1	113.92	-547.4	-1,037.2	617.7	570.6	47.10	13.113		
7,800.0	7,627.8	7,743.5	7,631.7	30.0	25.2	113.92	-548.2	-1,038.5	617.7	570.4	47.34	13.047		
7,900.0	7,727.8	7,843.5	7,731.7	30.1	25.3	113.92	-549.0	-1,039.9	617.7	570.1	47.58	12.981		
8,000.0	7,827.8	7,943.5	7,831.7	30.2	25.4	113.92	-549.7	-1,041.2	617.7	569.9	47.83	12.916		
8,100.0	7,927.7	8,043.5	7,931.6	30.3	25.5	113.92	-550.5	-1,042.6	617.7	569.6	48.07	12.850		
8,200.0	8,027.7	8,143.5	8,031.6	30.4	25.6	113.92	-551.3	-1,043.9	617.7	569.4	48.31	12.785		
8,300.0	8,127.7	8,243.5	8,131.6	30.5	25.8	113.92	-552.1	-1,045.3	617.7	569.1	48.56	12.720		
8,400.0	8,227.7	8,343.5	8,231.6	30.6	25.9	113.92	-552.9	-1,046.6	617.7	568.9	48.81	12.656		
8,500.0	8,327.7	8,443.5	8,331.6	30.7	26.0	113.92	-553.6	-1,048.0	617.7	568.6	49.06	12.592		
8,600.0	8,427.7	8,543.5	8,431.6	30.8	26.1	113.92	-554.4	-1,049.3	617.7	568.4	49.31	12.528		
8,700.0	8,527.7	8,643.5	8,531.6	30.9	26.2	113.92	-555.2	-1,050.7	617.7	568.1	49.56	12.464		
8,800.0	8,627.7	8,743.5	8,631.6	31.0	26.4	113.92	-556.0	-1,052.0	617.7	567.9	49.81	12.401		
8,900.0	8,727.6	8,843.5	8,731.5	31.2	26.5	113.93	-556.7	-1,053.4	617.7	567.6	50.06	12.338		
9,000.0	8,827.6	8,943.5	8,831.5	31.3	26.6	113.93	-557.5	-1,054.7	617.7	567.4	50.32	12.276		
9,100.0	8,927.6	9,043.5	8,931.5	31.4	26.7	113.93	-558.3	-1,056.1	617.7	567.1	50.57	12.214		
9,200.0	9,027.6	9,143.5	9,031.5	31.5	26.9	113.93	-559.1	-1,057.4	617.7	566.9	50.83	12.152		
9,300.0	9,127.6	9,243.5	9,131.5	31.6	27.0	113.93	-559.9	-1,058.8	617.7	566.6	51.09	12.091		
9,400.0	9,227.6	9,343.5	9,231.5	31.7	27.1	113.93	-560.6	-1,060.1	617.7	566.3	51.35	12.030		
9,500.0	9,327.6	9,443.5	9,331.5	31.8	27.2	113.93	-561.4	-1,061.5	617.7	566.1	51.61	11.969		
9,600.0	9,427.6	9,543.5	9,431.5	31.9	27.4	113.93	-562.2	-1,062.8	617.7	565.8	51.87	11.908		
9,700.0	9,527.5	9,643.5	9,531.5	32.0	27.5	113.93	-563.0	-1,064.2	617.7	565.6	52.13	11.848		
9,800.0	9,627.5	9,743.5	9,631.4	32.2	27.6	113.93	-563.7	-1,065.5	617.7	565.3	52.40	11.789		
9,900.0	9,727.5	9,843.5	9,731.4	32.3	27.7	113.93	-564.5	-1,066.9	617.7	565.0	52.66	11.730		
10,000.0	9,827.5	9,943.5	9,831.4	32.4	27.9	113.93	-565.3	-1,068.2	617.7	564.8	52.93	11.671		
10,100.0	9,927.5	10,043.5	9,931.4	32.5	28.0	113.93	-566.1	-1,069.6	617.7	564.5	53.19	11.612		
10,121.5	9,949.0	10,065.0	9,952.9	32.5	28.0	113.93	-566.2	-1,069.8	617.7	564.4	53.25	11.600 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 6-32D
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 6-32D	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	36.61	36.1	26.8	44.9					
100.0	100.0	100.0	100.0	0.1	0.1	36.61	36.1	26.8	44.9	44.6	0.27	164.984		
200.0	200.0	200.0	200.0	0.3	0.3	36.61	36.1	26.8	44.9	44.3	0.62	72.296 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	176.83	36.1	26.8	46.7	45.7	0.97	48.104		
400.0	399.8	401.2	401.1	0.7	0.7	175.80	35.7	25.0	50.6	49.3	1.32	38.283		
500.0	499.5	502.3	502.2	0.9	0.9	172.67	34.7	19.8	55.5	53.8	1.68	33.021		
600.0	598.7	603.4	602.8	1.2	1.1	168.12	33.0	11.0	61.7	59.6	2.06	29.887		
700.0	697.5	704.3	703.0	1.5	1.3	162.80	30.5	-1.2	69.5	67.0	2.50	27.824		
800.0	795.6	804.7	802.1	1.9	1.6	157.32	27.5	-16.6	79.4	76.3	3.01	26.350		
900.0	893.1	903.7	899.6	2.3	2.0	153.41	24.3	-33.0	92.2	88.7	3.57	25.803		
1,000.0	990.3	1,002.6	997.1	2.7	2.3	150.77	21.0	-49.3	106.2	102.0	4.17	25.455		
1,100.0	1,087.6	1,101.5	1,094.7	3.1	2.6	148.74	17.8	-65.7	120.4	115.6	4.79	25.119		
1,200.0	1,184.9	1,200.4	1,192.2	3.6	2.9	147.14	14.6	-82.0	134.6	129.2	5.43	24.816		
1,300.0	1,282.1	1,299.3	1,289.7	4.0	3.3	145.85	11.4	-98.4	149.0	142.9	6.07	24.548		
1,400.0	1,379.4	1,398.2	1,387.2	4.4	3.6	144.79	8.1	-114.7	163.4	156.7	6.72	24.315		
1,500.0	1,476.6	1,497.1	1,484.7	4.9	3.9	143.90	4.9	-131.1	177.9	170.5	7.38	24.111		
1,600.0	1,573.9	1,596.1	1,582.2	5.3	4.3	143.14	1.7	-147.4	192.4	184.3	8.04	23.933		
1,700.0	1,671.1	1,695.0	1,679.7	5.8	4.6	142.49	-1.5	-163.7	206.9	198.2	8.70	23.776		
1,800.0	1,768.4	1,793.9	1,777.2	6.2	5.0	141.92	-4.8	-180.1	221.4	212.1	9.37	23.638		
1,900.0	1,865.6	1,892.8	1,874.7	6.7	5.3	141.42	-8.0	-196.4	236.0	226.0	10.04	23.516		
2,000.0	1,962.9	1,991.7	1,972.2	7.1	5.6	140.98	-11.2	-212.8	250.6	239.9	10.71	23.406		
2,100.0	2,060.2	2,090.6	2,069.7	7.5	6.0	140.59	-14.4	-229.1	265.2	253.8	11.38	23.308		
2,200.0	2,157.4	2,189.5	2,167.2	8.0	6.3	140.25	-17.7	-245.5	279.8	267.7	12.05	23.220		
2,300.0	2,254.7	2,288.5	2,264.7	8.4	6.6	139.93	-20.9	-261.8	294.4	281.7	12.72	23.140		
2,400.0	2,351.9	2,387.4	2,362.2	8.9	7.0	139.64	-24.1	-278.1	309.0	295.6	13.40	23.067		
2,500.0	2,449.2	2,486.3	2,459.7	9.3	7.3	139.39	-27.3	-294.5	323.6	309.6	14.07	23.001		
2,600.0	2,546.4	2,585.2	2,557.2	9.8	7.7	139.15	-30.5	-310.8	338.3	323.5	14.75	22.940		
2,700.0	2,643.7	2,684.1	2,654.7	10.2	8.0	138.93	-33.8	-327.2	352.9	337.5	15.42	22.884		
2,800.0	2,740.9	2,783.0	2,752.2	10.7	8.3	138.73	-37.0	-343.5	367.5	351.4	16.10	22.833		
2,900.0	2,838.2	2,881.9	2,849.7	11.1	8.7	138.55	-40.2	-359.9	382.2	365.4	16.77	22.785		
3,000.0	2,935.5	2,980.9	2,947.2	11.5	9.0	138.38	-43.4	-376.2	396.8	379.4	17.45	22.741		
3,100.0	3,032.7	3,079.8	3,044.7	12.0	9.4	138.22	-46.7	-392.5	411.5	393.4	18.13	22.700		
3,200.0	3,130.0	3,178.7	3,142.2	12.4	9.7	138.07	-49.9	-408.9	426.2	407.3	18.80	22.662		
3,300.0	3,227.2	3,277.6	3,239.7	12.9	10.0	137.93	-53.1	-425.2	440.8	421.3	19.48	22.626		
3,400.0	3,324.5	3,376.5	3,337.2	13.3	10.4	137.80	-56.3	-441.6	455.5	435.3	20.16	22.593		
3,500.0	3,421.7	3,475.4	3,434.7	13.8	10.7	137.68	-59.6	-457.9	470.1	449.3	20.84	22.561		
3,600.0	3,519.0	3,574.3	3,532.2	14.2	11.1	137.57	-62.8	-474.3	484.8	463.3	21.52	22.532		
3,700.0	3,616.2	3,673.3	3,629.7	14.7	11.4	137.46	-66.0	-490.6	499.5	477.3	22.19	22.504		
3,800.0	3,713.5	3,772.2	3,727.2	15.1	11.8	137.36	-69.2	-506.9	514.1	491.3	22.87	22.478		
3,900.0	3,810.8	3,871.1	3,824.7	15.6	12.1	137.26	-72.5	-523.3	528.8	505.3	23.55	22.453		
4,000.0	3,908.0	3,970.0	3,922.2	16.0	12.4	137.17	-75.7	-539.6	543.5	519.3	24.23	22.430		
4,100.0	4,005.3	4,068.9	4,019.7	16.4	12.8	137.09	-78.9	-556.0	558.2	533.2	24.91	22.408		
4,200.0	4,102.5	4,167.8	4,117.2	16.9	13.1	137.01	-82.1	-572.3	572.8	547.2	25.59	22.387		
4,300.0	4,199.8	4,266.7	4,214.7	17.3	13.5	136.93	-85.4	-588.7	587.5	561.2	26.27	22.367		
4,400.0	4,297.0	4,365.7	4,312.2	17.8	13.8	136.86	-88.6	-605.0	602.2	575.2	26.95	22.348		
4,500.0	4,394.3	4,464.6	4,409.7	18.2	14.1	136.79	-91.8	-621.3	616.9	589.2	27.62	22.330		
4,600.0	4,491.6	4,563.5	4,507.2	18.7	14.5	136.72	-95.0	-637.7	631.5	603.2	28.30	22.313		
4,700.0	4,588.8	4,662.4	4,604.7	19.1	14.8	136.66	-98.3	-654.0	646.2	617.2	28.98	22.296		
4,800.0	4,686.1	4,761.3	4,702.2	19.6	15.2	136.60	-101.5	-670.4	660.9	631.2	29.66	22.280		
4,900.0	4,783.3	4,860.2	4,799.7	20.0	15.5	136.54	-104.7	-686.7	675.6	645.2	30.34	22.265		
5,000.0	4,880.6	4,959.1	4,897.2	20.5	15.8	136.48	-107.9	-703.1	690.3	659.2	31.02	22.251		
5,100.0	4,977.8	5,058.1	4,994.7	20.9	16.2	136.43	-111.2	-719.4	704.9	673.2	31.70	22.237		

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 6-32D
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 6-32D	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	5,075.1	5,157.0	5,092.2	21.4	16.5	136.38	-114.4	-735.7	719.6	687.2	32.38	22.224		
5,300.0	5,172.3	5,255.9	5,189.7	21.8	16.9	136.33	-117.6	-752.1	734.3	701.2	33.06	22.211		
5,400.0	5,269.6	5,354.8	5,287.2	22.2	17.2	136.28	-120.8	-768.4	749.0	715.2	33.74	22.199		
5,500.0	5,366.9	5,453.7	5,384.7	22.7	17.6	136.24	-124.1	-784.8	763.7	729.3	34.42	22.187		
5,600.0	5,464.1	5,552.6	5,482.2	23.1	17.9	136.19	-127.3	-801.1	778.4	743.3	35.10	22.176		
5,700.0	5,561.4	5,651.5	5,579.7	23.6	18.2	136.15	-130.5	-817.5	793.0	757.3	35.78	22.165		
5,800.0	5,658.6	5,750.5	5,677.2	24.0	18.6	136.11	-133.7	-833.8	807.7	771.3	36.46	22.155		
5,900.0	5,755.9	5,849.4	5,774.7	24.5	18.9	136.07	-137.0	-850.1	822.4	785.3	37.14	22.145		
6,000.0	5,853.1	5,948.3	5,872.2	24.9	19.3	136.03	-140.2	-866.5	837.1	799.3	37.82	22.135		
6,100.0	5,950.4	6,047.2	5,969.7	25.4	19.6	136.00	-143.4	-882.8	851.8	813.3	38.50	22.126		
6,200.0	6,047.6	6,146.1	6,067.2	25.8	19.9	135.96	-146.6	-899.2	866.5	827.3	39.18	22.116		
6,300.0	6,144.9	6,245.0	6,164.7	26.3	20.3	135.93	-149.8	-915.5	881.2	841.3	39.86	22.108		
6,400.0	6,242.2	6,343.9	6,262.2	26.7	20.6	135.89	-153.1	-931.9	895.8	855.3	40.54	22.099		
6,500.0	6,339.4	6,442.9	6,359.7	27.1	21.0	135.86	-156.3	-948.2	910.5	869.3	41.22	22.091		
6,600.0	6,436.7	6,541.8	6,457.2	27.6	21.3	135.83	-159.5	-964.6	925.2	883.3	41.90	22.083		
6,700.0	6,533.9	6,640.7	6,554.7	28.0	21.6	135.80	-162.7	-980.9	939.9	897.3	42.58	22.075		
6,800.0	6,631.6	6,739.8	6,652.4	28.4	22.0	135.89	-166.0	-997.3	953.3	910.1	43.25	22.040		
6,900.0	6,729.9	6,839.1	6,750.3	28.8	22.3	135.79	-169.2	-1,013.7	964.3	920.3	43.94	21.945		
7,000.0	6,828.8	6,934.9	6,844.9	29.0	22.6	135.63	-172.1	-1,028.1	972.9	928.4	44.54	21.842		
7,100.0	6,928.2	7,030.7	6,940.1	29.3	22.9	135.48	-174.3	-1,039.5	979.5	934.4	45.04	21.746		
7,200.0	7,027.9	7,126.8	7,035.8	29.4	23.0	135.36	-175.9	-1,047.8	984.0	938.5	45.44	21.655		
7,300.0	7,127.8	7,223.0	7,131.9	29.5	23.2	135.26	-177.0	-1,052.9	986.4	940.7	45.73	21.568		
7,400.0	7,227.8	7,319.4	7,228.2	29.6	23.3	135.04	-177.3	-1,054.8	986.8	940.9	45.95	21.476		
7,500.0	7,327.8	7,420.6	7,329.5	29.7	23.4	135.05	-177.4	-1,055.0	986.9	940.7	46.16	21.381		
7,600.0	7,427.8	7,522.5	7,431.3	29.8	23.5	135.05	-177.7	-1,055.6	986.9	940.6	46.38	21.280		
7,700.0	7,527.8	7,624.4	7,533.2	29.9	23.6	135.06	-178.3	-1,056.5	987.0	940.4	46.61	21.174		
7,800.0	7,627.8	7,725.5	7,634.3	30.0	23.7	135.07	-179.0	-1,057.8	987.0	940.2	46.86	21.066		
7,900.0	7,727.8	7,825.5	7,734.3	30.1	23.9	135.07	-179.8	-1,059.1	987.0	939.9	47.10	20.957		
8,000.0	7,827.8	7,925.5	7,834.3	30.2	24.0	135.07	-180.6	-1,060.5	987.0	939.7	47.34	20.850		
8,100.0	7,927.7	8,025.5	7,934.3	30.3	24.1	135.07	-181.4	-1,061.8	987.0	939.4	47.58	20.742		
8,200.0	8,027.7	8,125.5	8,034.3	30.4	24.2	135.07	-182.1	-1,063.2	987.0	939.2	47.83	20.636		
8,300.0	8,127.7	8,225.5	8,134.3	30.5	24.3	135.07	-182.9	-1,064.5	987.0	938.9	48.08	20.530		
8,400.0	8,227.7	8,325.5	8,234.2	30.6	24.5	135.07	-183.7	-1,065.9	987.0	938.7	48.33	20.424		
8,500.0	8,327.7	8,425.5	8,334.2	30.7	24.6	135.07	-184.5	-1,067.2	987.0	938.4	48.58	20.319		
8,600.0	8,427.7	8,525.5	8,434.2	30.8	24.7	135.07	-185.3	-1,068.6	987.0	938.2	48.83	20.214		
8,700.0	8,527.7	8,625.5	8,534.2	30.9	24.8	135.07	-186.0	-1,069.9	987.0	937.9	49.08	20.110		
8,800.0	8,627.7	8,725.5	8,634.2	31.0	25.0	135.07	-186.8	-1,071.3	987.0	937.7	49.33	20.007		
8,900.0	8,727.6	8,825.5	8,734.2	31.2	25.1	135.07	-187.6	-1,072.6	987.0	937.4	49.59	19.904		
9,000.0	8,827.6	8,925.5	8,834.2	31.3	25.2	135.07	-188.4	-1,073.9	987.0	937.2	49.84	19.802		
9,100.0	8,927.6	9,025.5	8,934.2	31.4	25.4	135.07	-189.2	-1,075.3	987.0	936.9	50.10	19.700		
9,200.0	9,027.6	9,125.5	9,034.1	31.5	25.5	135.07	-189.9	-1,076.6	987.0	936.6	50.36	19.599		
9,300.0	9,127.6	9,225.5	9,134.1	31.6	25.6	135.07	-190.7	-1,078.0	987.0	936.4	50.62	19.498		
9,400.0	9,227.6	9,325.5	9,234.1	31.7	25.7	135.07	-191.5	-1,079.3	987.0	936.1	50.88	19.398		
9,500.0	9,327.6	9,425.5	9,334.1	31.8	25.9	135.07	-192.3	-1,080.7	987.0	935.9	51.14	19.299		
9,600.0	9,427.6	9,525.5	9,434.1	31.9	26.0	135.07	-193.1	-1,082.0	987.0	935.6	51.40	19.200		
9,700.0	9,527.5	9,625.5	9,534.1	32.0	26.1	135.07	-193.8	-1,083.4	987.0	935.3	51.67	19.102		
9,800.0	9,627.5	9,725.5	9,634.1	32.2	26.3	135.07	-194.6	-1,084.7	987.0	935.1	51.93	19.005		
9,900.0	9,727.5	9,825.5	9,734.1	32.3	26.4	135.07	-195.4	-1,086.1	987.0	934.8	52.20	18.908		
10,000.0	9,827.5	9,925.5	9,834.0	32.4	26.5	135.07	-196.2	-1,087.4	987.0	934.5	52.47	18.812		
10,100.0	9,927.5	10,025.5	9,934.0	32.5	26.7	135.07	-197.0	-1,088.8	987.0	934.2	52.73	18.716		
10,121.5	9,949.0	10,047.0	9,955.5	32.5	26.7	135.07	-197.1	-1,089.0	987.0	934.2	52.79	18.696 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 6-32D
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 6-32D	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		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	36.68	48.1	35.8	60.0					
100.0	100.0	100.0	100.0	0.1	0.1	36.68	48.1	35.8	60.0	59.7	0.27	220.185		
200.0	200.0	200.0	200.0	0.3	0.3	36.68	48.1	35.8	60.0	59.3	0.62	96.486 CC, ES		
300.0	300.0	301.1	301.1	0.5	0.5	175.45	48.2	34.0	60.8	59.8	0.98	62.323		
400.0	399.8	402.1	401.9	0.7	0.7	171.68	48.6	28.7	63.4	62.1	1.34	47.214		
500.0	499.5	502.7	502.1	0.9	0.9	166.11	49.3	19.9	68.3	66.6	1.74	39.196		
600.0	598.7	602.9	601.5	1.2	1.2	159.62	50.2	7.6	76.1	73.9	2.20	34.593		
700.0	697.5	702.2	699.7	1.5	1.5	153.31	51.4	-7.7	87.2	84.5	2.72	32.064		
800.0	795.6	800.9	797.1	1.9	1.8	149.11	52.6	-23.4	102.0	98.7	3.28	31.122		
900.0	893.1	899.2	894.1	2.3	2.1	146.86	53.8	-39.0	120.0	116.1	3.86	31.056		
1,000.0	990.3	997.3	991.0	2.7	2.4	145.51	55.0	-54.6	138.8	134.3	4.47	31.066		
1,100.0	1,087.6	1,095.5	1,087.9	3.1	2.7	144.49	56.2	-70.3	157.7	152.6	5.08	31.020		
1,200.0	1,184.9	1,193.7	1,184.8	3.6	3.1	143.69	57.4	-85.9	176.6	170.9	5.71	30.952		
1,300.0	1,282.1	1,291.8	1,281.8	4.0	3.4	143.04	58.5	-101.5	195.5	189.2	6.33	30.875		
1,400.0	1,379.4	1,390.0	1,378.7	4.4	3.7	142.50	59.7	-117.2	214.5	207.5	6.96	30.798		
1,500.0	1,476.6	1,488.2	1,475.6	4.9	4.0	142.06	60.9	-132.8	233.5	225.9	7.60	30.724		
1,600.0	1,573.9	1,586.3	1,572.5	5.3	4.4	141.68	62.1	-148.4	252.5	244.2	8.24	30.654		
1,700.0	1,671.1	1,684.5	1,669.4	5.8	4.7	141.35	63.3	-164.1	271.5	262.6	8.87	30.590		
1,800.0	1,768.4	1,782.7	1,766.3	6.2	5.0	141.07	64.5	-179.7	290.5	281.0	9.51	30.530		
1,900.0	1,865.6	1,880.8	1,863.2	6.7	5.3	140.82	65.7	-195.3	309.5	299.3	10.16	30.475		
2,000.0	1,962.9	1,979.0	1,960.1	7.1	5.7	140.60	66.9	-210.9	328.5	317.7	10.80	30.424		
2,100.0	2,060.2	2,077.2	2,057.0	7.5	6.0	140.40	68.1	-226.6	347.5	336.1	11.44	30.378		
2,200.0	2,157.4	2,175.3	2,153.9	8.0	6.3	140.22	69.3	-242.2	366.6	354.5	12.08	30.334		
2,300.0	2,254.7	2,273.5	2,250.8	8.4	6.6	140.07	70.5	-257.8	385.6	372.9	12.73	30.295		
2,400.0	2,351.9	2,371.7	2,347.7	8.9	6.9	139.92	71.6	-273.5	404.6	391.2	13.37	30.258		
2,500.0	2,449.2	2,469.8	2,444.6	9.3	7.3	139.79	72.8	-289.1	423.7	409.6	14.02	30.223		
2,600.0	2,546.4	2,568.0	2,541.6	9.8	7.6	139.67	74.0	-304.7	442.7	428.0	14.66	30.191		
2,700.0	2,643.7	2,666.2	2,638.5	10.2	7.9	139.56	75.2	-320.3	461.7	446.4	15.31	30.162		
2,800.0	2,740.9	2,764.3	2,735.4	10.7	8.2	139.46	76.4	-336.0	480.8	464.8	15.95	30.134		
2,900.0	2,838.2	2,862.5	2,832.3	11.1	8.6	139.37	77.6	-351.6	499.8	483.2	16.60	30.108		
3,000.0	2,935.5	2,960.7	2,929.2	11.5	8.9	139.28	78.8	-367.2	518.8	501.6	17.25	30.084		
3,100.0	3,032.7	3,058.8	3,026.1	12.0	9.2	139.20	80.0	-382.9	537.9	520.0	17.89	30.061		
3,200.0	3,130.0	3,157.0	3,123.0	12.4	9.5	139.13	81.2	-398.5	556.9	538.4	18.54	30.040		
3,300.0	3,227.2	3,255.2	3,219.9	12.9	9.9	139.06	82.4	-414.1	576.0	556.8	19.19	30.019		
3,400.0	3,324.5	3,353.4	3,316.8	13.3	10.2	138.99	83.5	-429.8	595.0	575.2	19.83	30.000		
3,500.0	3,421.7	3,451.5	3,413.7	13.8	10.5	138.93	84.7	-445.4	614.1	593.6	20.48	29.982		
3,600.0	3,519.0	3,549.7	3,510.6	14.2	10.9	138.87	85.9	-461.0	633.1	612.0	21.13	29.965		
3,700.0	3,616.2	3,647.9	3,607.5	14.7	11.2	138.82	87.1	-476.6	652.2	630.4	21.78	29.949		
3,800.0	3,713.5	3,746.0	3,704.5	15.1	11.5	138.77	88.3	-492.3	671.2	648.8	22.42	29.934		
3,900.0	3,810.8	3,844.2	3,801.4	15.6	11.8	138.72	89.5	-507.9	690.3	667.2	23.07	29.919		
4,000.0	3,908.0	3,942.4	3,898.3	16.0	12.2	138.67	90.7	-523.5	709.3	685.6	23.72	29.906		
4,100.0	4,005.3	4,040.5	3,995.2	16.4	12.5	138.63	91.9	-539.2	728.4	704.0	24.37	29.892		
4,200.0	4,102.5	4,138.7	4,092.1	16.9	12.8	138.59	93.1	-554.8	747.4	722.4	25.01	29.880		
4,300.0	4,199.8	4,236.9	4,189.0	17.3	13.1	138.55	94.3	-570.4	766.5	740.8	25.66	29.868		
4,400.0	4,297.0	4,335.0	4,285.9	17.8	13.5	138.51	95.5	-586.0	785.5	759.2	26.31	29.856		
4,500.0	4,394.3	4,433.2	4,382.8	18.2	13.8	138.48	96.6	-601.7	804.6	777.6	26.96	29.845		
4,600.0	4,491.6	4,531.4	4,479.7	18.7	14.1	138.44	97.8	-617.3	823.6	796.0	27.61	29.835		
4,700.0	4,588.8	4,629.5	4,576.6	19.1	14.4	138.41	99.0	-632.9	842.7	814.4	28.25	29.825		
4,800.0	4,686.1	4,727.7	4,673.5	19.6	14.8	138.38	100.2	-648.6	861.7	832.8	28.90	29.815		
4,900.0	4,783.3	4,825.9	4,770.4	20.0	15.1	138.35	101.4	-664.2	880.8	851.2	29.55	29.806		
5,000.0	4,880.6	4,924.0	4,867.3	20.5	15.4	138.32	102.6	-679.8	899.8	869.6	30.20	29.797		
5,100.0	4,977.8	5,022.2	4,964.3	20.9	15.7	138.29	103.8	-695.5	918.9	888.0	30.85	29.789		

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 6-32D
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 6-32D	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 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		
5,200.0	5,075.1	5,120.4	5,061.2	21.4	16.1	138.27	105.0	-711.1	937.9	906.4	31.49	29.781		
5,300.0	5,172.3	5,218.5	5,158.1	21.8	16.4	138.24	106.2	-726.7	957.0	924.8	32.14	29.773		
5,400.0	5,269.6	5,316.7	5,255.0	22.2	16.7	138.22	107.4	-742.3	976.0	943.2	32.79	29.765		
5,500.0	5,366.9	5,414.9	5,351.9	22.7	17.0	138.20	108.6	-758.0	995.1	961.6	33.44	29.758		
5,600.0	5,464.1	5,513.0	5,448.8	23.1	17.4	138.17	109.7	-773.6	1,014.1	980.0	34.09	29.751		
5,700.0	5,561.4	5,611.2	5,545.7	23.6	17.7	138.15	110.9	-789.2	1,033.2	998.4	34.74	29.744		
5,800.0	5,658.6	5,709.4	5,642.6	24.0	18.0	138.13	112.1	-804.9	1,052.2	1,016.8	35.38	29.737		
5,900.0	5,755.9	5,807.5	5,739.5	24.5	18.3	138.11	113.3	-820.5	1,071.3	1,035.2	36.03	29.731		
6,000.0	5,853.1	5,905.7	5,836.4	24.9	18.7	138.09	114.5	-836.1	1,090.3	1,053.7	36.68	29.725		
6,100.0	5,950.4	6,003.9	5,933.3	25.4	19.0	138.08	115.7	-851.7	1,109.4	1,072.1	37.33	29.719		
6,200.0	6,047.6	6,102.0	6,030.2	25.8	19.3	138.06	116.9	-867.4	1,128.4	1,090.5	37.98	29.713		
6,300.0	6,144.9	6,200.2	6,127.2	26.3	19.6	138.04	118.1	-883.0	1,147.5	1,108.9	38.63	29.708		
6,400.0	6,242.2	6,298.4	6,224.1	26.7	20.0	138.02	119.3	-898.6	1,166.5	1,127.3	39.27	29.702		
6,500.0	6,339.4	6,396.5	6,321.0	27.1	20.3	138.01	120.5	-914.3	1,185.6	1,145.7	39.92	29.697		
6,600.0	6,436.7	6,494.7	6,417.9	27.6	20.6	137.99	121.7	-929.9	1,204.7	1,164.1	40.57	29.692 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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			
0.0	0.0	0.0	0.0	0.0	0.0	36.72	60.1	44.8	75.0					
100.0	100.0	100.0	100.0	0.1	0.1	36.72	60.1	44.8	75.0	74.7	0.27	275.386		
200.0	200.0	200.0	200.0	0.3	0.3	36.72	60.1	44.8	75.0	74.4	0.62	120.675 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	176.89	60.1	44.8	76.7	75.8	0.97	79.092		
400.0	399.8	400.6	400.6	0.7	0.7	175.90	60.7	43.2	81.4	80.1	1.32	61.621		
500.0	499.5	501.0	500.9	0.9	0.9	173.00	62.5	38.2	88.8	87.1	1.69	52.661		
600.0	598.7	600.9	600.3	1.2	1.1	168.88	65.4	30.0	99.2	97.1	2.08	47.671		
700.0	697.5	700.0	698.7	1.5	1.3	164.22	69.5	18.6	113.0	110.4	2.52	44.778		
800.0	795.6	798.2	795.6	1.9	1.6	159.55	74.7	4.2	130.5	127.5	3.04	42.978		
900.0	893.1	895.4	891.4	2.3	2.0	155.70	80.6	-12.0	151.8	148.2	3.59	42.268		
1,000.0	990.3	992.6	987.0	2.7	2.3	153.03	86.4	-28.2	174.4	170.2	4.18	41.718		
1,100.0	1,087.6	1,089.7	1,082.6	3.1	2.6	150.96	92.2	-44.4	197.3	192.5	4.79	41.214		
1,200.0	1,184.9	1,186.8	1,178.2	3.6	2.9	149.33	98.0	-60.6	220.3	214.9	5.40	40.770		
1,300.0	1,282.1	1,284.0	1,273.8	4.0	3.3	148.00	103.9	-76.7	243.5	237.5	6.03	40.385		
1,400.0	1,379.4	1,381.1	1,369.4	4.4	3.6	146.91	109.7	-92.9	266.8	260.1	6.66	40.051		
1,500.0	1,476.6	1,478.2	1,465.0	4.9	4.0	145.99	115.5	-109.1	290.1	282.8	7.30	39.762		
1,600.0	1,573.9	1,575.4	1,560.6	5.3	4.3	145.21	121.3	-125.3	313.6	305.6	7.94	39.511		
1,700.0	1,671.1	1,672.5	1,656.2	5.8	4.7	144.53	127.2	-141.5	337.0	328.5	8.58	39.291		
1,800.0	1,768.4	1,769.7	1,751.8	6.2	5.0	143.95	133.0	-157.6	360.5	351.3	9.22	39.097		
1,900.0	1,865.6	1,866.8	1,847.4	6.7	5.3	143.43	138.8	-173.8	384.1	374.2	9.87	38.925		
2,000.0	1,962.9	1,963.9	1,943.0	7.1	5.7	142.98	144.6	-190.0	407.7	397.1	10.51	38.772		
2,100.0	2,060.2	2,061.1	2,038.6	7.5	6.0	142.57	150.5	-206.2	431.3	420.1	11.16	38.636		
2,200.0	2,157.4	2,158.2	2,134.2	8.0	6.4	142.21	156.3	-222.4	454.9	443.0	11.81	38.512		
2,300.0	2,254.7	2,255.3	2,229.8	8.4	6.7	141.88	162.1	-238.6	478.5	466.0	12.46	38.401		
2,400.0	2,351.9	2,352.5	2,325.4	8.9	7.1	141.58	167.9	-254.7	502.1	489.0	13.11	38.300		
2,500.0	2,449.2	2,449.6	2,421.0	9.3	7.4	141.31	173.8	-270.9	525.8	512.0	13.76	38.208		
2,600.0	2,546.4	2,546.7	2,516.6	9.8	7.8	141.07	179.6	-287.1	549.4	535.0	14.41	38.124		
2,700.0	2,643.7	2,643.9	2,612.2	10.2	8.1	140.84	185.4	-303.3	573.1	558.0	15.06	38.047		
2,800.0	2,740.9	2,741.0	2,707.8	10.7	8.5	140.63	191.2	-319.5	596.8	581.1	15.71	37.976		
2,900.0	2,838.2	2,838.1	2,803.4	11.1	8.8	140.44	197.1	-335.7	620.5	604.1	16.37	37.910		
3,000.0	2,935.5	2,935.3	2,899.0	11.5	9.2	140.26	202.9	-351.8	644.1	627.1	17.02	37.849		
3,100.0	3,032.7	3,032.4	2,994.6	12.0	9.5	140.10	208.7	-368.0	667.8	650.2	17.67	37.792		
3,200.0	3,130.0	3,129.5	3,090.2	12.4	9.8	139.94	214.5	-384.2	691.5	673.2	18.32	37.739		
3,300.0	3,227.2	3,226.7	3,185.8	12.9	10.2	139.80	220.4	-400.4	715.2	696.3	18.98	37.690		
3,400.0	3,324.5	3,323.8	3,281.4	13.3	10.5	139.66	226.2	-416.6	738.9	719.3	19.63	37.644		
3,500.0	3,421.7	3,420.9	3,377.0	13.8	10.9	139.54	232.0	-432.7	762.7	742.4	20.28	37.601		
3,600.0	3,519.0	3,518.1	3,472.6	14.2	11.2	139.42	237.8	-448.9	786.4	765.4	20.94	37.560		
3,700.0	3,616.2	3,615.2	3,568.2	14.7	11.6	139.31	243.7	-465.1	810.1	788.5	21.59	37.522		
3,800.0	3,713.5	3,712.4	3,663.8	15.1	11.9	139.20	249.5	-481.3	833.8	811.6	22.24	37.486		
3,900.0	3,810.8	3,809.5	3,759.4	15.6	12.3	139.10	255.3	-497.5	857.5	834.6	22.90	37.452		
4,000.0	3,908.0	3,906.6	3,855.0	16.0	12.6	139.01	261.1	-513.7	881.3	857.7	23.55	37.420		
4,100.0	4,005.3	4,003.8	3,950.6	16.4	13.0	138.92	267.0	-529.8	905.0	880.8	24.20	37.390		
4,200.0	4,102.5	4,100.9	4,046.2	16.9	13.3	138.83	272.8	-546.0	928.7	903.9	24.86	37.361		
4,300.0	4,199.8	4,198.0	4,141.8	17.3	13.7	138.75	278.6	-562.2	952.4	926.9	25.51	37.333		
4,400.0	4,297.0	4,295.2	4,237.4	17.8	14.0	138.68	284.4	-578.4	976.2	950.0	26.17	37.307		
4,500.0	4,394.3	4,392.3	4,333.0	18.2	14.4	138.60	290.3	-594.6	999.9	973.1	26.82	37.283		
4,600.0	4,491.6	4,489.4	4,428.6	18.7	14.7	138.53	296.1	-610.8	1,023.6	996.2	27.47	37.259		
4,700.0	4,588.8	4,586.6	4,524.2	19.1	15.1	138.47	301.9	-626.9	1,047.4	1,019.3	28.13	37.236		
4,800.0	4,686.1	4,683.7	4,619.8	19.6	15.4	138.40	307.7	-643.1	1,071.1	1,042.3	28.78	37.215		
4,900.0	4,783.3	4,780.8	4,715.4	20.0	15.8	138.34	313.6	-659.3	1,094.9	1,065.4	29.44	37.194		
5,000.0	4,880.6	4,878.0	4,811.0	20.5	16.1	138.28	319.4	-675.5	1,118.6	1,088.5	30.09	37.174		
5,100.0	4,977.8	4,975.1	4,906.6	20.9	16.5	138.23	325.2	-691.7	1,142.3	1,111.6	30.74	37.155		

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 6-32D
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 6-32D	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						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		
5,200.0	5,075.1	5,072.2	5,002.2	21.4	16.8	138.17	331.0	-707.9	1,166.1	1,134.7	31.40	37.137		
5,300.0	5,172.3	5,169.4	5,097.8	21.8	17.2	138.12	336.9	-724.0	1,189.8	1,157.8	32.05	37.120		
5,400.0	5,269.6	5,266.5	5,193.4	22.2	17.5	138.07	342.7	-740.2	1,213.6	1,180.9	32.71	37.103 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 6-32D
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 6-32D	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	36.61	72.1	53.6	89.8					
100.0	100.0	100.0	100.0	0.1	0.1	36.61	72.1	53.6	89.8	89.6	0.27	329.968		
200.0	200.0	200.0	200.0	0.3	0.3	36.61	72.1	53.6	89.8	89.2	0.62	144.593 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	175.68	73.1	52.2	91.6	90.6	0.97	94.017		
400.0	399.8	399.7	399.5	0.7	0.7	172.81	76.2	47.9	96.9	95.5	1.34	72.183		
500.0	499.5	498.7	498.1	0.9	0.9	168.70	81.1	40.9	106.2	104.5	1.74	61.072		
600.0	598.7	596.7	595.4	1.2	1.2	164.07	88.0	31.2	120.0	117.8	2.18	55.155		
700.0	697.5	693.4	691.0	1.5	1.5	159.50	96.7	19.0	138.5	135.8	2.66	52.074		
800.0	795.6	789.8	785.7	1.9	1.8	155.53	106.8	4.8	161.6	158.4	3.18	50.863		
900.0	893.1	885.9	880.2	2.3	2.1	152.92	117.0	-9.5	188.1	184.4	3.72	50.574		
1,000.0	990.3	981.8	974.6	2.7	2.5	151.21	127.2	-23.8	215.7	211.4	4.29	50.321		
1,100.0	1,087.6	1,077.8	1,068.9	3.1	2.8	149.88	137.4	-38.1	243.4	238.6	4.86	50.048		
1,200.0	1,184.9	1,173.7	1,163.2	3.6	3.2	148.83	147.6	-52.4	271.3	265.8	5.45	49.783		
1,300.0	1,282.1	1,269.7	1,257.5	4.0	3.5	147.97	157.8	-66.7	299.2	293.1	6.04	49.537		
1,400.0	1,379.4	1,365.6	1,351.9	4.4	3.9	147.26	167.9	-81.0	327.1	320.5	6.63	49.312		
1,500.0	1,476.6	1,461.6	1,446.2	4.9	4.2	146.66	178.1	-95.3	355.1	347.9	7.23	49.110		
1,600.0	1,573.9	1,557.5	1,540.5	5.3	4.6	146.15	188.3	-109.6	383.1	375.3	7.83	48.928		
1,700.0	1,671.1	1,653.4	1,634.8	5.8	4.9	145.70	198.5	-123.9	411.1	402.7	8.43	48.764		
1,800.0	1,768.4	1,749.4	1,729.2	6.2	5.3	145.32	208.7	-138.2	439.2	430.2	9.03	48.615		
1,900.0	1,865.6	1,845.3	1,823.5	6.7	5.6	144.98	218.9	-152.5	467.3	457.6	9.64	48.481		
2,000.0	1,962.9	1,941.3	1,917.8	7.1	6.0	144.68	229.0	-166.8	495.4	485.1	10.24	48.360		
2,100.0	2,060.2	2,037.2	2,012.1	7.5	6.3	144.41	239.2	-181.1	523.5	512.6	10.85	48.249		
2,200.0	2,157.4	2,133.2	2,106.4	8.0	6.7	144.17	249.4	-195.4	551.6	540.1	11.46	48.148		
2,300.0	2,254.7	2,229.1	2,200.8	8.4	7.0	143.95	259.6	-209.7	579.7	567.6	12.06	48.056		
2,400.0	2,351.9	2,325.0	2,295.1	8.9	7.4	143.75	269.8	-224.0	607.8	595.1	12.67	47.971		
2,500.0	2,449.2	2,421.0	2,389.4	9.3	7.7	143.57	280.0	-238.3	635.9	622.7	13.28	47.893		
2,600.0	2,546.4	2,516.9	2,483.7	9.8	8.1	143.40	290.1	-252.6	664.1	650.2	13.89	47.820		
2,700.0	2,643.7	2,612.9	2,578.1	10.2	8.4	143.25	300.3	-266.9	692.2	677.7	14.50	47.753		
2,800.0	2,740.9	2,708.8	2,672.4	10.7	8.8	143.11	310.5	-281.2	720.4	705.2	15.10	47.691		
2,900.0	2,838.2	2,804.8	2,766.7	11.1	9.1	142.98	320.7	-295.5	748.5	732.8	15.71	47.633		
3,000.0	2,935.5	2,900.7	2,861.0	11.5	9.5	142.86	330.9	-309.8	776.7	760.3	16.32	47.579		
3,100.0	3,032.7	2,996.7	2,955.4	12.0	9.8	142.75	341.0	-324.1	804.8	787.9	16.93	47.528		
3,200.0	3,130.0	3,092.6	3,049.7	12.4	10.2	142.65	351.2	-338.4	833.0	815.4	17.54	47.481		
3,300.0	3,227.2	3,188.5	3,144.0	12.9	10.5	142.55	361.4	-352.7	861.1	843.0	18.15	47.437		
3,400.0	3,324.5	3,284.5	3,238.3	13.3	10.9	142.46	371.6	-367.0	889.3	870.5	18.76	47.395		
3,500.0	3,421.7	3,380.4	3,332.7	13.8	11.2	142.37	381.8	-381.3	917.4	898.1	19.37	47.355		
3,600.0	3,519.0	3,476.4	3,427.0	14.2	11.6	142.29	392.0	-395.6	945.6	925.6	19.98	47.318		
3,700.0	3,616.2	3,572.3	3,521.3	14.7	11.9	142.22	402.1	-409.9	973.8	953.2	20.59	47.283		
3,800.0	3,713.5	3,668.3	3,615.6	15.1	12.3	142.15	412.3	-424.2	1,001.9	980.7	21.21	47.250		
3,900.0	3,810.8	3,764.2	3,710.0	15.6	12.6	142.08	422.5	-438.5	1,030.1	1,008.3	21.82	47.218		
4,000.0	3,908.0	3,860.1	3,804.3	16.0	13.0	142.01	432.7	-452.8	1,058.3	1,035.9	22.43	47.188		
4,100.0	4,005.3	3,956.1	3,898.6	16.4	13.3	141.95	442.9	-467.1	1,086.4	1,063.4	23.04	47.160		
4,200.0	4,102.5	4,052.0	3,992.9	16.9	13.7	141.90	453.1	-481.4	1,114.6	1,091.0	23.65	47.132		
4,300.0	4,199.8	4,148.0	4,087.2	17.3	14.0	141.84	463.2	-495.7	1,142.8	1,118.5	24.26	47.107		
4,400.0	4,297.0	4,243.9	4,181.6	17.8	14.4	141.79	473.4	-510.0	1,171.0	1,146.1	24.87	47.082		
4,500.0	4,394.3	4,339.9	4,275.9	18.2	14.7	141.74	483.6	-524.3	1,199.1	1,173.7	25.48	47.058 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 6-32D
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 6-32D	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 6-32D
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.67°

