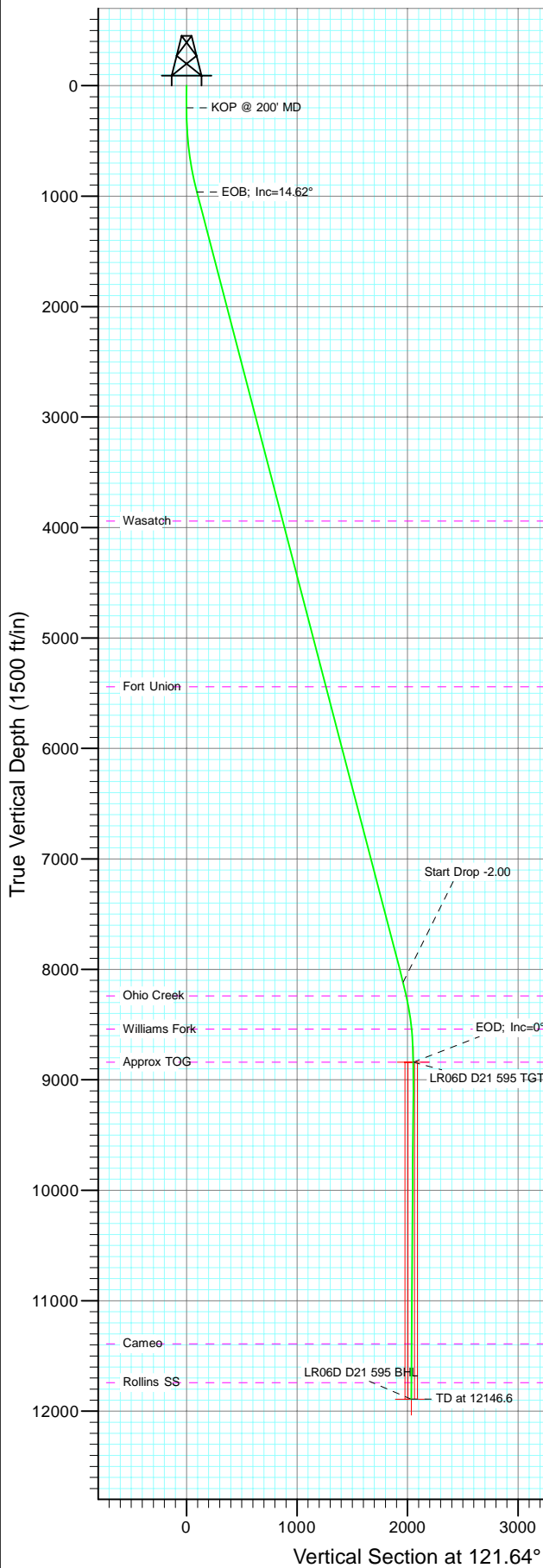
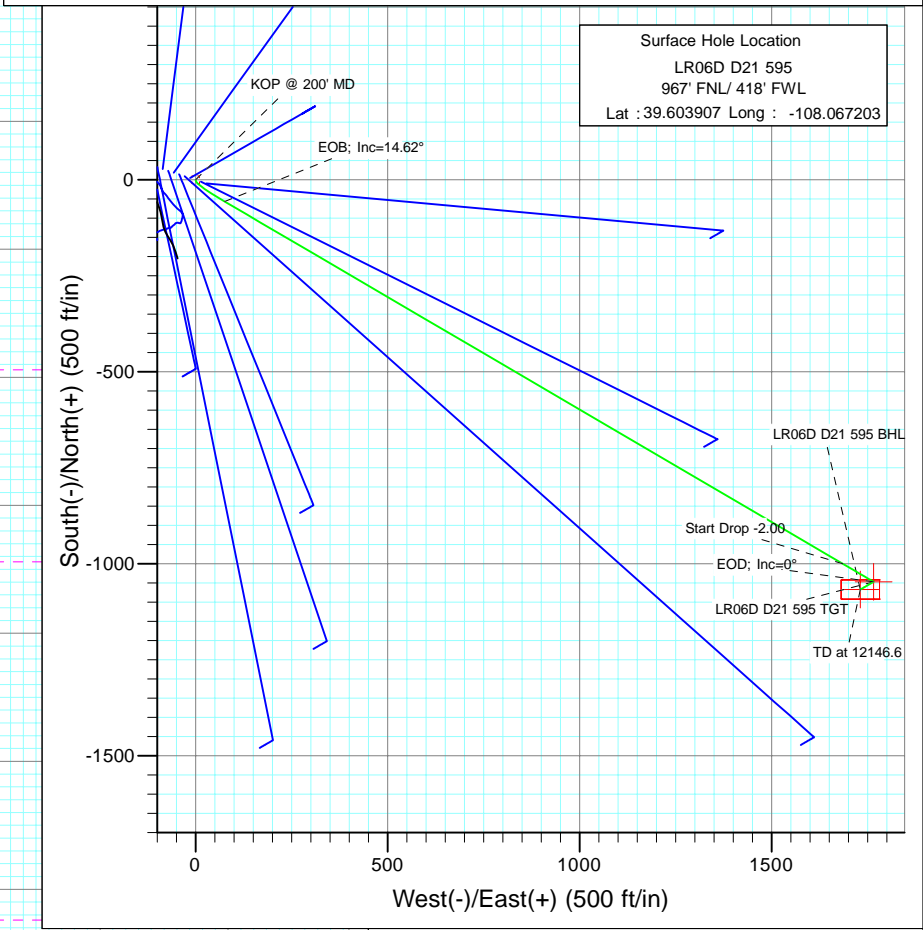


Project: Garfield County
Site: D21 595 Pad
Well: LR06D D21 595
Wellbore: DD
Design: Plan #2



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	300.0	2.00	170.00	300.0	-1.7	0.3	2.00	170.00	1.2	
4	970.4	14.62	120.37	962.4	-56.3	75.7	2.00	-56.02	93.9	
5	8365.4	14.62	120.37	8118.0	-999.9	1685.9	0.00	0.00	1959.9	
6	9096.4	0.00	0.00	8841.0	-1046.8	1766.0	2.00	180.00	2052.6	LR06D D21 595 TGT
7	9413.9	0.79	240.00	9158.5	-1047.9	1764.0	0.25	240.00	2051.5	
8	12146.6	0.79	240.00	11891.0	-1066.8	1731.3	0.00	0.00	2033.6	LR06D D21 595 BHL



Azimuths to True North
Magnetic North: 10.44°

Magnetic Field
Strength: 52368.8snT
Dip Angle: 65.84°
Date: 11/23/2010
Model: IGRF200510

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3941.0	4048.7	Wasatch
5441.0	5598.9	Fort Union
8241.0	8491.9	Ohio Creek
8541.0	8795.8	Williams Fork
8841.0	9096.4	Approx TOG
11391.0	11646.6	Cameo
11741.0	11996.6	Rollins SS

DESIGN DETAILS: Plan #2					
1055XX; BH					
KBE @ 8278.0ft (Original Well Elev)					
Target	Azimuth	Origin	N/S	E/W	From TVD
LR06D D21 595 BHL	121.64	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 LR06D D21 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	North Reference:	True
Well:	LR06D D21 595	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		D21 595 Pad			
Site Position:		Northing:	1,655,115.77 ft	Latitude:	39.604011
From:	Lat/Long	Easting:	2,276,632.91 ft	Longitude:	-108.067607
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.62 °

Well	LR06D D21 595					
Well Position	+N/-S	0.0 ft	Northing:	1,655,074.68 ft	Latitude:	39.603907
	+E/-W	0.0 ft	Easting:	2,276,745.63 ft	Longitude:	-108.067203
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,263.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/23/2010	10.44	65.84	52,369

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	121.64

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	
300.0	2.00	170.00	300.0	-1.7	0.3	2.00	2.00	0.00	170.00	
970.4	14.62	120.37	962.4	-56.3	75.7	2.00	1.88	-7.40	-56.02	
8,365.4	14.62	120.37	8,118.0	-999.9	1,685.9	0.00	0.00	0.00	0.00	
9,096.4	0.00	0.00	8,841.0	-1,046.8	1,766.0	2.00	-2.00	0.00	180.00	LR06D D21 595 TGT
9,413.9	0.79	240.00	9,158.5	-1,047.9	1,764.0	0.25	0.25	-37.79	240.00	
12,146.6	0.79	240.00	11,891.0	-1,066.8	1,731.3	0.00	0.00	0.00	0.00	LR06D D21 595 BHL

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well LR06D D21 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	North Reference:	True
Well:	LR06D D21 595	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	170.00	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	170.00	240.0	-0.3	0.0	0.2	2.00	2.00	
270.0	1.40	170.00	270.0	-0.8	0.1	0.6	2.00	2.00	
300.0	2.00	170.00	300.0	-1.7	0.3	1.2	2.00	2.00	
330.0	2.39	157.97	330.0	-2.8	0.6	2.0	2.00	1.29	
360.0	2.85	149.56	359.9	-4.0	1.2	3.2	2.00	1.54	
390.0	3.36	143.58	389.9	-5.4	2.1	4.6	2.00	1.69	
420.0	3.89	139.20	419.8	-6.9	3.3	6.4	2.00	1.78	
450.0	4.44	135.90	449.7	-8.5	4.8	8.5	2.00	1.83	
480.0	5.00	133.32	479.6	-10.2	6.6	10.9	2.00	1.87	
510.0	5.57	131.27	509.5	-12.1	8.6	13.6	2.00	1.90	
540.0	6.15	129.60	539.4	-14.0	10.9	16.7	2.00	1.92	
570.0	6.72	128.21	569.2	-16.1	13.6	20.0	2.00	1.93	
600.0	7.31	127.05	598.9	-18.4	16.5	23.7	2.00	1.94	
630.0	7.89	126.05	628.7	-20.7	19.6	27.6	2.00	1.95	
660.0	8.48	125.19	658.4	-23.2	23.1	31.9	2.00	1.96	
690.0	9.07	124.45	688.0	-25.8	26.9	36.4	2.00	1.96	
720.0	9.66	123.79	717.6	-28.6	30.9	41.3	2.00	1.97	
750.0	10.25	123.21	747.2	-31.4	35.2	46.5	2.00	1.97	
780.0	10.84	122.69	776.7	-34.4	39.9	52.0	2.00	1.97	
810.0	11.44	122.23	806.1	-37.5	44.7	57.8	2.00	1.98	
840.0	12.03	121.81	835.5	-40.8	49.9	63.9	2.00	1.98	
870.0	12.63	121.42	864.8	-44.1	55.4	70.3	2.00	1.98	
900.0	13.22	121.08	894.0	-47.6	61.1	77.0	2.00	1.98	
930.0	13.82	120.76	923.2	-51.2	67.1	84.0	2.00	1.98	
960.0	14.41	120.47	952.3	-54.9	73.4	91.3	2.00	1.99	
970.4	14.62	120.37	962.3	-56.3	75.7	93.9	2.00	1.99	EOB; Inc=14.62°
990.0	14.62	120.37	981.3	-58.8	79.9	98.9	0.00	0.00	
1,020.0	14.62	120.37	1,010.3	-62.6	86.5	106.4	0.00	0.00	
1,050.0	14.62	120.37	1,039.4	-66.4	93.0	114.0	0.00	0.00	
1,080.0	14.62	120.37	1,068.4	-70.2	99.5	121.6	0.00	0.00	
1,110.0	14.62	120.37	1,097.4	-74.1	106.1	129.2	0.00	0.00	
1,140.0	14.62	120.37	1,126.5	-77.9	112.6	136.7	0.00	0.00	
1,170.0	14.62	120.37	1,155.5	-81.7	119.1	144.3	0.00	0.00	
1,200.0	14.62	120.37	1,184.5	-85.6	125.7	151.9	0.00	0.00	
1,230.0	14.62	120.37	1,213.5	-89.4	132.2	159.4	0.00	0.00	
1,260.0	14.62	120.37	1,242.6	-93.2	138.7	167.0	0.00	0.00	
1,290.0	14.62	120.37	1,271.6	-97.0	145.3	174.6	0.00	0.00	
1,320.0	14.62	120.37	1,300.6	-100.9	151.8	182.1	0.00	0.00	
1,350.0	14.62	120.37	1,329.7	-104.7	158.3	189.7	0.00	0.00	
1,380.0	14.62	120.37	1,358.7	-108.5	164.9	197.3	0.00	0.00	
1,410.0	14.62	120.37	1,387.7	-112.4	171.4	204.9	0.00	0.00	
1,440.0	14.62	120.37	1,416.7	-116.2	177.9	212.4	0.00	0.00	
1,470.0	14.62	120.37	1,445.8	-120.0	184.5	220.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well LR06D D21 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	North Reference:	True
Well:	LR06D D21 595	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	14.62	120.37	1,474.8	-123.8	191.0	227.6	0.00	0.00	
1,530.0	14.62	120.37	1,503.8	-127.7	197.5	235.1	0.00	0.00	
1,560.0	14.62	120.37	1,532.9	-131.5	204.1	242.7	0.00	0.00	
1,590.0	14.62	120.37	1,561.9	-135.3	210.6	250.3	0.00	0.00	
1,620.0	14.62	120.37	1,590.9	-139.2	217.1	257.8	0.00	0.00	
1,650.0	14.62	120.37	1,619.9	-143.0	223.7	265.4	0.00	0.00	
1,680.0	14.62	120.37	1,649.0	-146.8	230.2	273.0	0.00	0.00	
1,710.0	14.62	120.37	1,678.0	-150.6	236.7	280.6	0.00	0.00	
1,740.0	14.62	120.37	1,707.0	-154.5	243.2	288.1	0.00	0.00	
1,770.0	14.62	120.37	1,736.1	-158.3	249.8	295.7	0.00	0.00	
1,800.0	14.62	120.37	1,765.1	-162.1	256.3	303.3	0.00	0.00	
1,830.0	14.62	120.37	1,794.1	-166.0	262.8	310.8	0.00	0.00	
1,860.0	14.62	120.37	1,823.2	-169.8	269.4	318.4	0.00	0.00	
1,890.0	14.62	120.37	1,852.2	-173.6	275.9	326.0	0.00	0.00	
1,920.0	14.62	120.37	1,881.2	-177.4	282.4	333.5	0.00	0.00	
1,950.0	14.62	120.37	1,910.2	-181.3	289.0	341.1	0.00	0.00	
1,980.0	14.62	120.37	1,939.3	-185.1	295.5	348.7	0.00	0.00	
2,010.0	14.62	120.37	1,968.3	-188.9	302.0	356.2	0.00	0.00	
2,040.0	14.62	120.37	1,997.3	-192.7	308.6	363.8	0.00	0.00	
2,070.0	14.62	120.37	2,026.4	-196.6	315.1	371.4	0.00	0.00	
2,100.0	14.62	120.37	2,055.4	-200.4	321.6	379.0	0.00	0.00	
2,130.0	14.62	120.37	2,084.4	-204.2	328.2	386.5	0.00	0.00	
2,160.0	14.62	120.37	2,113.4	-208.1	334.7	394.1	0.00	0.00	
2,190.0	14.62	120.37	2,142.5	-211.9	341.2	401.7	0.00	0.00	
2,220.0	14.62	120.37	2,171.5	-215.7	347.8	409.2	0.00	0.00	
2,250.0	14.62	120.37	2,200.5	-219.5	354.3	416.8	0.00	0.00	
2,280.0	14.62	120.37	2,229.6	-223.4	360.8	424.4	0.00	0.00	
2,310.0	14.62	120.37	2,258.6	-227.2	367.4	431.9	0.00	0.00	
2,340.0	14.62	120.37	2,287.6	-231.0	373.9	439.5	0.00	0.00	
2,370.0	14.62	120.37	2,316.6	-234.9	380.4	447.1	0.00	0.00	
2,400.0	14.62	120.37	2,345.7	-238.7	387.0	454.7	0.00	0.00	
2,430.0	14.62	120.37	2,374.7	-242.5	393.5	462.2	0.00	0.00	
2,460.0	14.62	120.37	2,403.7	-246.3	400.0	469.8	0.00	0.00	
2,490.0	14.62	120.37	2,432.8	-250.2	406.6	477.4	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									
LR06D D21 595 TGT	0.00	0.00	8,841.0	-1,046.8	1,766.0	1,653,978.40	2,278,481.30	39.601033	-108.060936
- plan misses target center by 6599.1ft at 2490.0ft MD (2432.8 TVD, -250.2 N, 406.6 E)									
- Point									
LR06D D21 595 BHL	0.00	0.00	11,891.0	-1,066.8	1,731.3	1,653,959.36	2,278,446.05	39.600978	-108.061059
- plan misses target center by 9585.4ft at 2490.0ft MD (2432.8 TVD, -250.2 N, 406.6 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 LR06D D21 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	North Reference:	True
Well:	LR06D D21 595	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	14.62	120.37	2,442.4	-251.4	408.7	479.9	0.00	0.00	
2,600.0	14.62	120.37	2,539.2	-264.2	430.5	505.1	0.00	0.00	
2,700.0	14.62	120.37	2,636.0	-277.0	452.3	530.4	0.00	0.00	
2,800.0	14.62	120.37	2,732.7	-289.7	474.1	555.6	0.00	0.00	
2,900.0	14.62	120.37	2,829.5	-302.5	495.8	580.8	0.00	0.00	
3,000.0	14.62	120.37	2,926.2	-315.3	517.6	606.0	0.00	0.00	
3,100.0	14.62	120.37	3,023.0	-328.0	539.4	631.3	0.00	0.00	
3,200.0	14.62	120.37	3,119.8	-340.8	561.2	656.5	0.00	0.00	
3,300.0	14.62	120.37	3,216.5	-353.5	582.9	681.7	0.00	0.00	
3,400.0	14.62	120.37	3,313.3	-366.3	604.7	707.0	0.00	0.00	
3,500.0	14.62	120.37	3,410.1	-379.1	626.5	732.2	0.00	0.00	
3,600.0	14.62	120.37	3,506.8	-391.8	648.3	757.4	0.00	0.00	
3,700.0	14.62	120.37	3,603.6	-404.6	670.0	782.7	0.00	0.00	
3,800.0	14.62	120.37	3,700.3	-417.3	691.8	807.9	0.00	0.00	
3,900.0	14.62	120.37	3,797.1	-430.1	713.6	833.1	0.00	0.00	
4,000.0	14.62	120.37	3,893.9	-442.9	735.4	858.4	0.00	0.00	
4,048.7	14.62	120.37	3,941.0	-449.1	746.0	870.7	0.00	0.00	Wasatch
4,100.0	14.62	120.37	3,990.6	-455.6	757.1	883.6	0.00	0.00	
4,200.0	14.62	120.37	4,087.4	-468.4	778.9	908.8	0.00	0.00	
4,300.0	14.62	120.37	4,184.2	-481.1	800.7	934.1	0.00	0.00	
4,400.0	14.62	120.37	4,280.9	-493.9	822.5	959.3	0.00	0.00	
4,500.0	14.62	120.37	4,377.7	-506.7	844.2	984.5	0.00	0.00	
4,600.0	14.62	120.37	4,474.4	-519.4	866.0	1,009.8	0.00	0.00	
4,700.0	14.62	120.37	4,571.2	-532.2	887.8	1,035.0	0.00	0.00	
4,800.0	14.62	120.37	4,668.0	-544.9	909.6	1,060.2	0.00	0.00	
4,900.0	14.62	120.37	4,764.7	-557.7	931.3	1,085.5	0.00	0.00	
5,000.0	14.62	120.37	4,861.5	-570.5	953.1	1,110.7	0.00	0.00	
5,100.0	14.62	120.37	4,958.3	-583.2	974.9	1,135.9	0.00	0.00	
5,200.0	14.62	120.37	5,055.0	-596.0	996.7	1,161.2	0.00	0.00	
5,300.0	14.62	120.37	5,151.8	-608.7	1,018.4	1,186.4	0.00	0.00	
5,400.0	14.62	120.37	5,248.5	-621.5	1,040.2	1,211.6	0.00	0.00	
5,500.0	14.62	120.37	5,345.3	-634.3	1,062.0	1,236.9	0.00	0.00	
5,598.9	14.62	120.37	5,441.0	-646.9	1,083.5	1,261.8	0.00	0.00	Fort Union
5,600.0	14.62	120.37	5,442.1	-647.0	1,083.8	1,262.1	0.00	0.00	
5,700.0	14.62	120.37	5,538.8	-659.8	1,105.5	1,287.3	0.00	0.00	
5,800.0	14.62	120.37	5,635.6	-672.5	1,127.3	1,312.6	0.00	0.00	
5,900.0	14.62	120.37	5,732.4	-685.3	1,149.1	1,337.8	0.00	0.00	
6,000.0	14.62	120.37	5,829.1	-698.1	1,170.9	1,363.0	0.00	0.00	
6,100.0	14.62	120.37	5,925.9	-710.8	1,192.6	1,388.3	0.00	0.00	
6,200.0	14.62	120.37	6,022.7	-723.6	1,214.4	1,413.5	0.00	0.00	
6,300.0	14.62	120.37	6,119.4	-736.3	1,236.2	1,438.7	0.00	0.00	
6,400.0	14.62	120.37	6,216.2	-749.1	1,258.0	1,463.9	0.00	0.00	
6,500.0	14.62	120.37	6,312.9	-761.9	1,279.7	1,489.2	0.00	0.00	
6,600.0	14.62	120.37	6,409.7	-774.6	1,301.5	1,514.4	0.00	0.00	
6,700.0	14.62	120.37	6,506.5	-787.4	1,323.3	1,539.6	0.00	0.00	
6,800.0	14.62	120.37	6,603.2	-800.2	1,345.1	1,564.9	0.00	0.00	
6,900.0	14.62	120.37	6,700.0	-812.9	1,366.8	1,590.1	0.00	0.00	
7,000.0	14.62	120.37	6,796.8	-825.7	1,388.6	1,615.3	0.00	0.00	
7,100.0	14.62	120.37	6,893.5	-838.4	1,410.4	1,640.6	0.00	0.00	
7,200.0	14.62	120.37	6,990.3	-851.2	1,432.2	1,665.8	0.00	0.00	
7,300.0	14.62	120.37	7,087.0	-864.0	1,453.9	1,691.0	0.00	0.00	
7,400.0	14.62	120.37	7,183.8	-876.7	1,475.7	1,716.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well LR06D D21 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	North Reference:	True
Well:	LR06D D21 595	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
7,500.0	14.62	120.37	7,280.6	-889.5	1,497.5	1,741.5	0.00	0.00	
7,600.0	14.62	120.37	7,377.3	-902.2	1,519.3	1,766.7	0.00	0.00	
7,700.0	14.62	120.37	7,474.1	-915.0	1,541.0	1,792.0	0.00	0.00	
7,800.0	14.62	120.37	7,570.9	-927.8	1,562.8	1,817.2	0.00	0.00	
7,900.0	14.62	120.37	7,667.6	-940.5	1,584.6	1,842.4	0.00	0.00	
8,000.0	14.62	120.37	7,764.4	-953.3	1,606.4	1,867.7	0.00	0.00	
8,100.0	14.62	120.37	7,861.1	-966.0	1,628.1	1,892.9	0.00	0.00	
8,200.0	14.62	120.37	7,957.9	-978.8	1,649.9	1,918.1	0.00	0.00	
8,300.0	14.62	120.37	8,054.7	-991.6	1,671.7	1,943.4	0.00	0.00	
8,365.4	14.62	120.37	8,117.9	-999.9	1,685.9	1,959.9	0.00	0.00	Start Drop -2.00
8,400.0	13.93	120.37	8,151.5	-1,004.2	1,693.3	1,968.4	2.00	-2.00	
8,491.9	12.09	120.37	8,241.0	-1,014.7	1,711.1	1,989.1	2.00	-2.00	Ohio Creek
8,500.0	11.93	120.37	8,248.9	-1,015.5	1,712.6	1,990.8	2.00	-2.00	
8,600.0	9.93	120.37	8,347.1	-1,025.1	1,728.9	2,009.7	2.00	-2.00	
8,700.0	7.93	120.37	8,445.9	-1,033.0	1,742.3	2,025.2	2.00	-2.00	
8,795.8	6.01	120.37	8,541.0	-1,038.8	1,752.4	2,036.8	2.00	-2.00	Williams Fork
8,800.0	5.93	120.37	8,545.2	-1,039.1	1,752.7	2,037.3	2.00	-2.00	
8,900.0	3.93	120.37	8,644.8	-1,043.4	1,760.1	2,045.9	2.00	-2.00	
9,000.0	1.93	120.37	8,744.7	-1,046.0	1,764.6	2,051.0	2.00	-2.00	
9,096.4	0.00	0.00	8,841.0	-1,046.8	1,766.0	2,052.6	2.00	-2.00	EOD; Inc=0° - Approx TOG - LR06D D21 595 T
9,100.0	0.01	240.00	8,844.6	-1,046.8	1,765.9	2,052.6	0.25	0.25	
9,200.0	0.26	240.00	8,944.6	-1,046.9	1,765.7	2,052.5	0.25	0.25	
9,300.0	0.51	240.00	9,044.6	-1,047.3	1,765.2	2,052.2	0.25	0.25	
9,400.0	0.76	240.00	9,144.6	-1,047.8	1,764.2	2,051.6	0.25	0.25	
9,413.9	0.79	240.00	9,158.5	-1,047.9	1,764.0	2,051.5	0.25	0.25	
9,500.0	0.79	240.00	9,244.6	-1,048.5	1,763.0	2,051.0	0.00	0.00	
9,600.0	0.79	240.00	9,344.6	-1,049.2	1,761.8	2,050.3	0.00	0.00	
9,700.0	0.79	240.00	9,444.6	-1,049.9	1,760.6	2,049.7	0.00	0.00	
9,800.0	0.79	240.00	9,544.6	-1,050.6	1,759.4	2,049.0	0.00	0.00	
9,900.0	0.79	240.00	9,644.6	-1,051.3	1,758.2	2,048.3	0.00	0.00	
10,000.0	0.79	240.00	9,744.6	-1,052.0	1,757.0	2,047.7	0.00	0.00	
10,100.0	0.79	240.00	9,844.6	-1,052.7	1,755.8	2,047.0	0.00	0.00	
10,200.0	0.79	240.00	9,944.6	-1,053.3	1,754.6	2,046.4	0.00	0.00	
10,300.0	0.79	240.00	10,044.5	-1,054.0	1,753.4	2,045.7	0.00	0.00	
10,400.0	0.79	240.00	10,144.5	-1,054.7	1,752.2	2,045.1	0.00	0.00	
10,500.0	0.79	240.00	10,244.5	-1,055.4	1,751.0	2,044.4	0.00	0.00	
10,600.0	0.79	240.00	10,344.5	-1,056.1	1,749.8	2,043.7	0.00	0.00	
10,700.0	0.79	240.00	10,444.5	-1,056.8	1,748.6	2,043.1	0.00	0.00	
10,800.0	0.79	240.00	10,544.5	-1,057.5	1,747.4	2,042.4	0.00	0.00	
10,900.0	0.79	240.00	10,644.5	-1,058.2	1,746.2	2,041.8	0.00	0.00	
11,000.0	0.79	240.00	10,744.5	-1,058.9	1,745.0	2,041.1	0.00	0.00	
11,100.0	0.79	240.00	10,844.5	-1,059.6	1,743.8	2,040.4	0.00	0.00	
11,200.0	0.79	240.00	10,944.5	-1,060.3	1,742.6	2,039.8	0.00	0.00	
11,300.0	0.79	240.00	11,044.5	-1,061.0	1,741.4	2,039.1	0.00	0.00	
11,400.0	0.79	240.00	11,144.4	-1,061.7	1,740.2	2,038.5	0.00	0.00	
11,500.0	0.79	240.00	11,244.4	-1,062.3	1,739.0	2,037.8	0.00	0.00	
11,600.0	0.79	240.00	11,344.4	-1,063.0	1,737.8	2,037.2	0.00	0.00	
11,646.6	0.79	240.00	11,391.0	-1,063.4	1,737.3	2,036.9	0.00	0.00	Cameo
11,700.0	0.79	240.00	11,444.4	-1,063.7	1,736.6	2,036.5	0.00	0.00	
11,800.0	0.79	240.00	11,544.4	-1,064.4	1,735.4	2,035.8	0.00	0.00	
11,900.0	0.79	240.00	11,644.4	-1,065.1	1,734.2	2,035.2	0.00	0.00	
11,996.6	0.79	240.00	11,741.0	-1,065.8	1,733.1	2,034.5	0.00	0.00	Rollins SS

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well LR06D D21 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	North Reference:	True
Well:	LR06D D21 595	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
12,000.0	0.79	240.00	11,744.4	-1,065.8	1,733.0	2,034.5	0.00	0.00	
12,100.0	0.79	240.00	11,844.4	-1,066.5	1,731.8	2,033.9	0.00	0.00	
12,146.6	0.79	240.00	11,891.0	-1,066.8	1,731.3	2,033.6	0.00	0.00	TD at 12146.6 - LR06D D21 595 BHL

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
LR06D D21 595 TGT - plan hits target center - Point	0.00	0.00	8,841.0	-1,046.8	1,766.0	1,653,978.40	2,278,481.30	39.601033	-108.060936
LR06D D21 595 BHL - plan hits target center - Rectangle (sides W50.0 H100.0 D0.0)	0.00	0.00	11,891.0	-1,066.8	1,731.3	1,653,959.36	2,278,446.05	39.600978	-108.061059

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,048.7	3,941.0	Wasatch		0.00		
5,598.9	5,441.0	Fort Union		0.00		
8,491.9	8,241.0	Ohio Creek		0.00		
8,795.8	8,541.0	Williams Fork		0.00		
9,096.4	8,841.0	Approx TOG		0.00		
11,646.6	11,391.0	Cameo		0.00		
11,996.6	11,741.0	Rollins SS		0.00		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200' MD
970.4	962.3	-56.3	75.7	EOB; Inc=14.62°
8,365.4	8,117.9	-999.9	1,685.9	Start Drop -2.00
9,096.4	8,841.0	-1,046.8	1,766.0	EOD; Inc=0°
12,146.6	11,891.0	-1,066.8	1,731.3	TD at 12146.6

Berry Petroleum Company (NAD 83)

Garfield County

D21 595 Pad

LR06D D21 595

DD

Plan #2

Anticollision Report

03 December, 2010

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 1,399.5ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	12/3/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,146.6	Plan #2 (DD)	MWD	Geolink MWD	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
D21 595 Pad						
LR03C D21 595 - DD - Plan #2	200.0	200.0	30.0	29.3	46.445	CC, ES
LR03C D21 595 - DD - Plan #2	1,200.0	1,190.3	69.9	63.3	10.694	SF
LR04A D21 595 - DD - Plan #2	200.0	200.0	60.0	59.3	92.891	CC, ES
LR04A D21 595 - DD - Plan #2	700.0	697.3	96.9	94.4	38.770	SF
LR04B D21 595 - DD - Plan #2	200.0	200.0	90.0	89.3	139.336	CC, ES
LR04B D21 595 - DD - Plan #2	700.0	689.9	137.4	134.9	55.762	SF
LR04C D21 595 (Existing) - DD - DD	277.0	274.7	135.4	134.5	146.459	CC
LR04C D21 595 (Existing) - DD - DD	300.0	297.8	135.4	134.4	134.603	ES
LR04C D21 595 (Existing) - DD - DD	1,700.0	1,685.9	337.3	331.1	54.503	SF
LR04D D21 595 - DD - Plan #2	293.7	294.0	14.6	13.6	14.898	CC
LR04D D21 595 - DD - Plan #2	300.0	300.3	14.6	13.6	14.567	ES
LR04D D21 595 - DD - Plan #2	400.0	400.1	17.5	16.1	12.716	SF
LR05A D21 595 - DD - Plan #2	200.0	200.0	44.9	44.2	69.461	CC, ES
LR05A D21 595 - DD - Plan #2	800.0	802.8	72.9	69.9	24.576	SF
LR05B D21 595 (Existing) - DD - DD	0.0	0.0	152.1			
LR05B D21 595 (Existing) - DD - DD	3,000.0	2,981.0	578.6	565.6	44.510	SF
LR05BDR D21-595 - DD - Plan #2	309.4	311.8	119.9	118.8	112.469	CC, ES
LR05BDR D21-595 - DD - Plan #2	5,200.0	5,120.0	1,008.5	983.8	40.717	SF
LR05C D21 595 - DD - Plan #2	335.6	337.8	74.5	73.4	65.605	CC, ES
LR05C D21 595 - DD - Plan #2	8,500.0	8,395.0	1,392.8	1,340.9	26.866	SF
LR05D D21 595 - DD - Plan #2	306.2	308.2	104.8	103.8	101.975	CC, ES
LR05D D21 595 - DD - Plan #2	7,500.0	7,387.1	1,384.4	1,332.9	26.841	SF
LR06B D21 595 - DD - Plan #2	503.9	503.5	9.3	7.5	5.267	CC, ES, SF
LR06C D21 595 - DD - Plan #2	200.0	200.0	30.0	29.3	46.445	CC, ES
LR06C D21 595 - DD - Plan #2	6,100.0	6,129.7	275.3	220.8	5.052	SF

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR03C D21 595 - DD - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
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	108.41	-9.5	28.5	30.0						
100.0	100.0	100.0	100.0	0.1	0.1	108.41	-9.5	28.5	30.0	29.7	0.30	101.087			
200.0	200.0	200.0	200.0	0.3	0.3	108.41	-9.5	28.5	30.0	29.3	0.65	46.445 CC, ES			
300.0	300.0	298.9	298.9	0.5	0.5	-65.12	-9.6	30.2	30.9	29.9	1.00	31.024			
400.0	399.9	397.7	397.6	0.7	0.7	-44.51	-10.1	35.3	33.1	31.7	1.35	24.469			
500.0	499.6	496.4	495.9	0.9	0.9	-42.55	-10.9	43.7	36.0	34.3	1.72	20.889			
600.0	598.9	594.9	593.6	1.2	1.2	-45.95	-11.9	55.5	39.9	37.8	2.13	18.723			
700.0	697.9	693.5	691.1	1.5	1.5	-51.06	-13.3	70.6	45.0	42.4	2.61	17.213			
800.0	796.3	793.2	789.4	1.8	1.8	-57.92	-14.8	86.8	49.3	46.1	3.21	15.362			
900.0	894.0	892.7	887.6	2.2	2.1	-66.94	-16.3	103.0	52.7	48.8	3.96	13.322			
1,000.0	991.0	992.0	985.5	2.6	2.4	-78.14	-17.7	119.1	56.5	51.6	4.84	11.674			
1,100.0	1,087.8	1,091.1	1,083.4	3.1	2.8	-89.00	-19.2	135.3	62.3	56.5	5.72	10.889			
1,200.0	1,184.5	1,190.3	1,181.2	3.6	3.1	-97.78	-20.7	151.4	69.9	63.3	6.53	10.694 SF			
1,300.0	1,281.3	1,289.5	1,279.1	4.0	3.4	-104.72	-22.1	167.5	78.8	71.5	7.29	10.813			
1,400.0	1,378.0	1,388.7	1,377.0	4.5	3.8	-110.19	-23.6	183.7	88.7	80.7	7.99	11.091			
1,500.0	1,474.8	1,487.9	1,474.8	5.0	4.1	-114.55	-25.1	199.8	99.1	90.5	8.66	11.443			
1,600.0	1,571.6	1,587.1	1,572.7	5.5	4.4	-118.05	-26.6	216.0	110.1	100.8	9.31	11.823			
1,700.0	1,668.3	1,686.3	1,670.6	5.9	4.7	-120.92	-28.0	232.1	121.4	111.4	9.94	12.206			
1,800.0	1,765.1	1,785.5	1,768.4	6.4	5.1	-123.30	-29.5	248.2	132.9	122.3	10.57	12.579			
1,900.0	1,861.9	1,884.7	1,866.3	6.9	5.4	-125.30	-31.0	264.4	144.6	133.5	11.18	12.935			
2,000.0	1,958.6	1,983.9	1,964.1	7.4	5.7	-126.99	-32.4	280.5	156.5	144.7	11.79	13.273			
2,100.0	2,055.4	2,083.1	2,062.0	7.9	6.1	-128.45	-33.9	296.6	168.5	156.1	12.40	13.590			
2,200.0	2,152.1	2,182.3	2,159.9	8.3	6.4	-129.71	-35.4	312.8	180.6	167.6	13.00	13.887			
2,300.0	2,248.9	2,281.5	2,257.7	8.8	6.7	-130.81	-36.9	328.9	192.7	179.1	13.61	14.166			
2,400.0	2,345.7	2,380.7	2,355.6	9.3	7.1	-131.78	-38.3	345.0	204.9	190.7	14.21	14.426			
2,500.0	2,442.4	2,479.9	2,453.5	9.8	7.4	-132.65	-39.8	361.2	217.2	202.4	14.81	14.670			
2,600.0	2,539.2	2,579.1	2,551.3	10.3	7.7	-133.42	-41.3	377.3	229.5	214.1	15.41	14.898			
2,700.0	2,636.0	2,678.3	2,649.2	10.7	8.1	-134.11	-42.7	393.4	241.9	225.9	16.01	15.111			
2,800.0	2,732.7	2,777.5	2,747.0	11.2	8.4	-134.73	-44.2	409.6	254.3	237.6	16.60	15.312			
2,900.0	2,829.5	2,876.6	2,844.9	11.7	8.8	-135.30	-45.7	425.7	266.7	249.5	17.20	15.500			
3,000.0	2,926.2	2,975.8	2,942.8	12.2	9.1	-135.82	-47.1	441.9	279.1	261.3	17.80	15.678			
3,100.0	3,023.0	3,075.0	3,040.6	12.7	9.4	-136.29	-48.6	458.0	291.5	273.1	18.40	15.844			
3,200.0	3,119.8	3,174.2	3,138.5	13.2	9.8	-136.72	-50.1	474.1	304.0	285.0	19.00	16.002			
3,300.0	3,216.5	3,273.4	3,236.4	13.6	10.1	-137.12	-51.6	490.3	316.5	296.9	19.60	16.151			
3,400.0	3,313.3	3,372.6	3,334.2	14.1	10.4	-137.49	-53.0	506.4	329.0	308.8	20.19	16.291			
3,500.0	3,410.1	3,471.8	3,432.1	14.6	10.8	-137.83	-54.5	522.5	341.5	320.7	20.79	16.424			
3,600.0	3,506.8	3,571.0	3,529.9	15.1	11.1	-138.15	-56.0	538.7	354.0	332.6	21.39	16.550			
3,700.0	3,603.6	3,670.2	3,627.8	15.6	11.4	-138.45	-57.4	554.8	366.6	344.6	21.99	16.670			
3,800.0	3,700.3	3,769.4	3,725.7	16.0	11.8	-138.72	-58.9	570.9	379.1	356.5	22.59	16.784			
3,900.0	3,797.1	3,868.6	3,823.5	16.5	12.1	-138.98	-60.4	587.1	391.7	368.5	23.19	16.892			
4,000.0	3,893.9	3,967.8	3,921.4	17.0	12.4	-139.22	-61.9	603.2	404.2	380.4	23.78	16.996			
4,100.0	3,990.6	4,067.0	4,019.2	17.5	12.8	-139.45	-63.3	619.3	416.8	392.4	24.38	17.094			
4,200.0	4,087.4	4,166.2	4,117.1	18.0	13.1	-139.67	-64.8	635.5	429.3	404.4	24.98	17.188			
4,300.0	4,184.2	4,265.4	4,215.0	18.5	13.4	-139.87	-66.3	651.6	441.9	416.3	25.58	17.278			
4,400.0	4,280.9	4,364.6	4,312.8	18.9	13.8	-140.06	-67.7	667.8	454.5	428.3	26.18	17.363			
4,500.0	4,377.7	4,463.8	4,410.7	19.4	14.1	-140.24	-69.2	683.9	467.1	440.3	26.77	17.445			
4,600.0	4,474.4	4,562.9	4,508.6	19.9	14.4	-140.41	-70.7	700.0	479.7	452.3	27.37	17.524			
4,700.0	4,571.2	4,662.1	4,606.4	20.4	14.8	-140.58	-72.1	716.2	492.3	464.3	27.97	17.600			
4,800.0	4,668.0	4,761.3	4,704.3	20.9	15.1	-140.73	-73.6	732.3	504.9	476.3	28.57	17.672			
4,900.0	4,764.7	4,860.5	4,802.1	21.4	15.4	-140.88	-75.1	748.4	517.5	488.3	29.17	17.741			
5,000.0	4,861.5	4,959.7	4,900.0	21.8	15.8	-141.02	-76.6	764.6	530.1	500.3	29.77	17.808			
5,100.0	4,958.3	5,058.9	4,997.9	22.3	16.1	-141.15	-78.0	780.7	542.7	512.3	30.36	17.872			

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR03C D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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)				
5,200.0	5,055.0	5,158.1	5,095.7	22.8	16.4	-141.28	-79.5	796.8	555.3	524.3	30.96	17.934		
5,300.0	5,151.8	5,257.3	5,193.6	23.3	16.8	-141.40	-81.0	813.0	567.9	536.3	31.56	17.994		
5,400.0	5,248.5	5,356.5	5,291.5	23.8	17.1	-141.52	-82.4	829.1	580.5	548.4	32.16	18.051		
5,500.0	5,345.3	5,455.7	5,389.3	24.3	17.4	-141.63	-83.9	845.2	593.1	560.4	32.76	18.107		
5,600.0	5,442.1	5,554.9	5,487.2	24.7	17.8	-141.74	-85.4	861.4	605.7	572.4	33.36	18.160		
5,700.0	5,538.8	5,654.1	5,585.0	25.2	18.1	-141.84	-86.9	877.5	618.4	584.4	33.95	18.212		
5,800.0	5,635.6	5,753.3	5,682.9	25.7	18.4	-141.94	-88.3	893.7	631.0	596.4	34.55	18.262		
5,900.0	5,732.4	5,852.5	5,780.8	26.2	18.8	-142.03	-89.8	909.8	643.6	608.5	35.15	18.310		
6,000.0	5,829.1	5,951.7	5,878.6	26.7	19.1	-142.12	-91.3	925.9	656.2	620.5	35.75	18.356		
6,100.0	5,925.9	6,050.9	5,976.5	27.2	19.5	-142.21	-92.7	942.1	668.9	632.5	36.35	18.402		
6,200.0	6,022.7	6,150.1	6,074.4	27.6	19.8	-142.29	-94.2	958.2	681.5	644.6	36.95	18.445		
6,300.0	6,119.4	6,249.3	6,172.2	28.1	20.1	-142.38	-95.7	974.3	694.1	656.6	37.55	18.488		
6,400.0	6,216.2	6,348.4	6,270.1	28.6	20.5	-142.45	-97.1	990.5	706.8	668.6	38.14	18.529		
6,500.0	6,312.9	6,447.6	6,367.9	29.1	20.8	-142.53	-98.6	1,006.6	719.4	680.7	38.74	18.568		
6,600.0	6,409.7	6,546.8	6,465.8	29.6	21.1	-142.60	-100.1	1,022.7	732.0	692.7	39.34	18.607		
6,700.0	6,506.5	6,646.0	6,563.7	30.1	21.5	-142.67	-101.6	1,038.9	744.7	704.7	39.94	18.644		
6,800.0	6,603.2	6,745.2	6,661.5	30.5	21.8	-142.74	-103.0	1,055.0	757.3	716.8	40.54	18.681		
6,900.0	6,700.0	6,844.4	6,759.4	31.0	22.1	-142.81	-104.5	1,071.1	769.9	728.8	41.14	18.716		
7,000.0	6,796.8	6,943.6	6,857.3	31.5	22.5	-142.87	-106.0	1,087.3	782.6	740.8	41.74	18.750		
7,100.0	6,893.5	7,042.8	6,955.1	32.0	22.8	-142.93	-107.4	1,103.4	795.2	752.9	42.34	18.784		
7,200.0	6,990.3	7,142.0	7,053.0	32.5	23.1	-142.99	-108.9	1,119.6	807.9	764.9	42.93	18.816		
7,300.0	7,087.0	7,241.2	7,150.8	33.0	23.5	-143.05	-110.4	1,135.7	820.5	777.0	43.53	18.848		
7,400.0	7,183.8	7,340.4	7,248.7	33.4	23.8	-143.11	-111.9	1,151.8	833.1	789.0	44.13	18.879		
7,500.0	7,280.6	7,439.6	7,346.6	33.9	24.1	-143.16	-113.3	1,168.0	845.8	801.1	44.73	18.909		
7,600.0	7,377.3	7,538.8	7,444.4	34.4	24.5	-143.21	-114.8	1,184.1	858.4	813.1	45.33	18.938		
7,700.0	7,474.1	7,638.0	7,542.3	34.9	24.8	-143.27	-116.3	1,200.2	871.1	825.1	45.93	18.966		
7,800.0	7,570.9	7,737.2	7,640.1	35.4	25.1	-143.32	-117.7	1,216.4	883.7	837.2	46.53	18.994		
7,900.0	7,667.6	7,836.4	7,738.0	35.9	25.5	-143.36	-119.2	1,232.5	896.4	849.2	47.13	19.021		
8,000.0	7,764.4	7,935.6	7,835.9	36.3	25.8	-143.41	-120.7	1,248.6	909.0	861.3	47.72	19.047		
8,100.0	7,861.1	8,034.8	7,933.7	36.8	26.1	-143.46	-122.1	1,264.8	921.7	873.3	48.32	19.073		
8,200.0	7,957.9	8,133.9	8,031.6	37.3	26.5	-143.50	-123.6	1,280.9	934.3	885.4	48.92	19.098		
8,300.0	8,054.7	8,233.1	8,129.5	37.8	26.8	-143.55	-125.1	1,297.1	947.0	897.4	49.52	19.122		
8,400.0	8,151.5	8,332.4	8,227.3	38.3	27.2	-143.63	-126.6	1,313.2	959.4	909.3	50.12	19.144		
8,500.0	8,248.9	8,431.8	8,325.5	38.7	27.5	-143.69	-128.0	1,329.4	969.7	919.0	50.73	19.115		
8,600.0	8,347.1	8,523.5	8,416.0	39.0	27.8	-143.64	-129.4	1,343.9	977.4	926.1	51.32	19.045		
8,700.0	8,445.9	8,609.2	8,501.0	39.3	28.0	-143.59	-130.4	1,355.1	983.7	931.9	51.81	18.985		
8,800.0	8,545.2	8,700.0	8,591.3	39.5	28.2	-143.55	-131.2	1,364.3	988.5	936.3	52.23	18.928		
8,900.0	8,644.8	8,780.8	8,671.8	39.7	28.3	-143.54	-131.7	1,370.0	992.0	939.5	52.53	18.886		
9,000.0	8,744.7	8,866.6	8,757.6	39.8	28.5	-143.53	-132.1	1,373.6	994.1	941.3	52.76	18.843		
9,100.0	8,844.6	8,953.7	8,844.7	39.9	28.5	96.84	-132.2	1,374.7	994.8	941.9	52.92	18.798		
9,200.0	8,944.6	9,054.3	8,945.2	40.0	28.6	96.84	-132.3	1,374.5	994.8	941.7	53.12	18.729		
9,300.0	9,044.6	9,154.8	9,045.7	40.0	28.7	96.84	-132.6	1,373.9	994.8	941.5	53.30	18.663		
9,400.0	9,144.6	9,255.3	9,146.3	40.1	28.8	96.83	-133.2	1,372.9	994.8	941.3	53.48	18.602		
9,500.0	9,244.6	9,355.3	9,246.3	40.2	28.9	96.83	-133.9	1,371.7	994.8	941.1	53.65	18.541		
9,600.0	9,344.6	9,455.3	9,346.3	40.2	29.0	96.83	-134.6	1,370.5	994.8	941.0	53.83	18.480		
9,700.0	9,444.6	9,555.3	9,446.3	40.3	29.0	96.83	-135.3	1,369.3	994.8	940.8	54.01	18.419		
9,800.0	9,544.6	9,655.3	9,546.3	40.3	29.1	96.83	-136.0	1,368.1	994.8	940.6	54.19	18.357		
9,900.0	9,644.6	9,755.3	9,646.2	40.4	29.2	96.83	-136.7	1,366.9	994.8	940.4	54.37	18.295		
10,000.0	9,744.6	9,855.3	9,746.2	40.5	29.3	96.83	-137.4	1,365.7	994.8	940.2	54.56	18.234		
10,100.0	9,844.6	9,955.3	9,846.2	40.5	29.4	96.83	-138.1	1,364.5	994.8	940.0	54.74	18.172		
10,200.0	9,944.6	10,055.3	9,946.2	40.6	29.5	96.83	-138.8	1,363.3	994.8	939.8	54.93	18.110		
10,300.0	10,044.5	10,155.3	10,046.2	40.7	29.6	96.84	-139.5	1,362.1	994.8	939.7	55.12	18.048		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR03C D21 595 - 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		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
10,400.0	10,144.5	10,255.3	10,146.2	40.7	29.7	96.84	-140.2	1,360.9	994.8	939.5	55.31	17.985		
10,500.0	10,244.5	10,355.3	10,246.2	40.8	29.7	96.84	-140.8	1,359.7	994.8	939.3	55.50	17.923		
10,600.0	10,344.5	10,455.3	10,346.2	40.9	29.8	96.84	-141.5	1,358.5	994.8	939.1	55.70	17.861		
10,700.0	10,444.5	10,555.3	10,446.2	40.9	29.9	96.84	-142.2	1,357.3	994.8	938.9	55.89	17.798		
10,800.0	10,544.5	10,655.3	10,546.2	41.0	30.0	96.84	-142.9	1,356.1	994.8	938.7	56.09	17.736		
10,900.0	10,644.5	10,755.3	10,646.1	41.1	30.1	96.84	-143.6	1,354.9	994.8	938.5	56.29	17.673		
11,000.0	10,744.5	10,855.3	10,746.1	41.2	30.2	96.84	-144.3	1,353.7	994.8	938.3	56.49	17.611		
11,100.0	10,844.5	10,955.3	10,846.1	41.2	30.3	96.84	-145.0	1,352.5	994.8	938.1	56.69	17.548		
11,200.0	10,944.5	11,055.3	10,946.1	41.3	30.4	96.84	-145.7	1,351.3	994.8	937.9	56.89	17.486		
11,300.0	11,044.5	11,155.3	11,046.1	41.4	30.5	96.84	-146.4	1,350.2	994.8	937.7	57.09	17.423		
11,400.0	11,144.4	11,255.3	11,146.1	41.4	30.6	96.84	-147.1	1,349.0	994.8	937.5	57.30	17.361		
11,500.0	11,244.4	11,355.3	11,246.1	41.5	30.7	96.84	-147.8	1,347.8	994.7	937.2	57.51	17.298		
11,600.0	11,344.4	11,455.3	11,346.1	41.6	30.8	96.84	-148.5	1,346.6	994.7	937.0	57.71	17.236		
11,700.0	11,444.4	11,555.3	11,446.1	41.7	30.9	96.84	-149.2	1,345.4	994.7	936.8	57.92	17.173		
11,800.0	11,544.4	11,655.3	11,546.1	41.7	31.0	96.84	-149.9	1,344.2	994.7	936.6	58.14	17.111		
11,900.0	11,644.4	11,755.3	11,646.1	41.8	31.1	96.84	-150.6	1,343.0	994.7	936.4	58.35	17.048		
12,000.0	11,744.4	11,855.3	11,746.0	41.9	31.2	96.84	-151.2	1,341.8	994.7	936.2	58.56	16.986		
12,100.0	11,844.4	11,955.3	11,846.0	42.0	31.3	96.84	-151.9	1,340.6	994.7	936.0	58.78	16.924		
12,133.6	11,877.9	11,988.9	11,879.6	42.0	31.3	96.84	-152.2	1,340.2	994.7	935.9	58.85	16.903		
12,146.6	11,891.0	11,995.3	11,886.0	42.0	31.3	96.84	-152.2	1,340.1	994.8	935.9	58.87	16.897		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR04A D21 595 - 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	-71.59	18.9	-56.9	60.0					
100.0	100.0	100.0	100.0	0.1	0.1	-71.59	18.9	-56.9	60.0	59.7	0.30	202.173		
200.0	200.0	200.0	200.0	0.3	0.3	-71.59	18.9	-56.9	60.0	59.3	0.65	92.891 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	119.84	18.9	-56.9	60.8	59.8	1.00	60.987		
400.0	399.9	400.3	400.3	0.7	0.7	152.18	20.4	-55.9	64.0	62.7	1.35	47.296		
500.0	499.6	500.2	500.0	0.9	0.9	168.74	24.6	-52.8	70.6	68.9	1.72	41.128		
600.0	598.9	599.2	598.6	1.2	1.1	-179.16	31.6	-47.8	81.4	79.3	2.10	38.818		
700.0	697.9	697.3	696.1	1.5	1.3	-169.67	41.0	-41.0	96.9	94.4	2.50	38.770 SF		
800.0	796.3	795.1	793.1	1.8	1.6	-163.43	50.8	-34.0	116.5	113.6	2.92	39.916		
900.0	894.0	892.2	889.5	2.2	1.8	-159.60	60.6	-27.0	139.6	136.2	3.36	41.571		
1,000.0	991.0	988.7	985.3	2.6	2.1	-157.63	70.2	-20.0	165.6	161.8	3.82	43.405		
1,100.0	1,087.8	1,085.0	1,080.8	3.1	2.3	-156.96	79.9	-13.1	192.5	188.2	4.29	44.815		
1,200.0	1,184.5	1,181.3	1,176.4	3.6	2.6	-156.45	89.5	-6.2	219.3	214.5	4.78	45.865		
1,300.0	1,281.3	1,277.7	1,272.0	4.0	2.9	-156.05	99.2	0.8	246.2	240.9	5.27	46.669		
1,400.0	1,378.0	1,374.0	1,367.6	4.5	3.1	-155.74	108.8	7.7	273.0	267.3	5.77	47.299		
1,500.0	1,474.8	1,470.3	1,463.1	5.0	3.4	-155.47	118.5	14.7	299.9	293.6	6.27	47.804		
1,600.0	1,571.6	1,566.6	1,558.7	5.5	3.7	-155.25	128.1	21.6	326.8	320.0	6.78	48.215		
1,700.0	1,668.3	1,662.9	1,654.3	5.9	3.9	-155.07	137.8	28.5	353.7	346.4	7.28	48.554		
1,800.0	1,765.1	1,759.2	1,749.9	6.4	4.2	-154.91	147.4	35.5	380.6	372.8	7.79	48.839		
1,900.0	1,861.9	1,855.5	1,845.4	6.9	4.4	-154.77	157.1	42.4	407.5	399.2	8.30	49.081		
2,000.0	1,958.6	1,951.8	1,941.0	7.4	4.7	-154.65	166.8	49.4	434.4	425.5	8.81	49.289		
2,100.0	2,055.4	2,048.2	2,036.6	7.9	5.0	-154.54	176.4	56.3	461.2	451.9	9.32	49.469		
2,200.0	2,152.1	2,144.5	2,132.2	8.3	5.2	-154.45	186.1	63.2	488.1	478.3	9.84	49.626		
2,300.0	2,248.9	2,240.8	2,227.7	8.8	5.5	-154.36	195.7	70.2	515.0	504.7	10.35	49.764		
2,400.0	2,345.7	2,337.1	2,323.3	9.3	5.8	-154.29	205.4	77.1	541.9	531.1	10.86	49.886		
2,500.0	2,442.4	2,433.4	2,418.9	9.8	6.0	-154.22	215.0	84.1	568.8	557.4	11.38	49.995		
2,600.0	2,539.2	2,529.7	2,514.5	10.3	6.3	-154.15	224.7	91.0	595.7	583.8	11.89	50.093		
2,700.0	2,636.0	2,626.0	2,610.0	10.7	6.6	-154.10	234.3	97.9	622.6	610.2	12.41	50.181		
2,800.0	2,732.7	2,722.3	2,705.6	11.2	6.8	-154.04	244.0	104.9	649.5	636.6	12.92	50.261		
2,900.0	2,829.5	2,818.7	2,801.2	11.7	7.1	-154.00	253.6	111.8	676.4	663.0	13.44	50.333		
3,000.0	2,926.2	2,915.0	2,896.8	12.2	7.4	-153.95	263.3	118.8	703.3	689.4	13.95	50.400		
3,100.0	3,023.0	3,011.3	2,992.4	12.7	7.6	-153.91	272.9	125.7	730.2	715.7	14.47	50.460		
3,200.0	3,119.8	3,107.6	3,087.9	13.2	7.9	-153.87	282.6	132.6	757.1	742.1	14.99	50.516		
3,300.0	3,216.5	3,203.9	3,183.5	13.6	8.2	-153.83	292.2	139.6	784.0	768.5	15.50	50.567		
3,400.0	3,313.3	3,300.2	3,279.1	14.1	8.4	-153.80	301.9	146.5	810.9	794.9	16.02	50.615		
3,500.0	3,410.1	3,396.5	3,374.7	14.6	8.7	-153.77	311.5	153.5	837.8	821.3	16.54	50.659		
3,600.0	3,506.8	3,492.8	3,470.2	15.1	9.0	-153.74	321.2	160.4	864.7	847.7	17.06	50.700		
3,700.0	3,603.6	3,589.2	3,565.8	15.6	9.2	-153.71	330.9	167.3	891.6	874.0	17.57	50.738		
3,800.0	3,700.3	3,685.5	3,661.4	16.0	9.5	-153.68	340.5	174.3	918.5	900.4	18.09	50.774		
3,900.0	3,797.1	3,781.8	3,757.0	16.5	9.8	-153.66	350.2	181.2	945.4	926.8	18.61	50.807		
4,000.0	3,893.9	3,878.1	3,852.5	17.0	10.0	-153.64	359.8	188.2	972.3	953.2	19.13	50.838		
4,100.0	3,990.6	3,974.4	3,948.1	17.5	10.3	-153.61	369.5	195.1	999.2	979.6	19.64	50.868		
4,200.0	4,087.4	4,070.7	4,043.7	18.0	10.6	-153.59	379.1	202.0	1,026.1	1,006.0	20.16	50.895		
4,300.0	4,184.2	4,167.0	4,139.3	18.5	10.8	-153.57	388.8	209.0	1,053.0	1,032.4	20.68	50.921		
4,400.0	4,280.9	4,263.3	4,234.8	18.9	11.1	-153.56	398.4	215.9	1,079.9	1,058.7	21.20	50.946		
4,500.0	4,377.7	4,359.7	4,330.4	19.4	11.4	-153.54	408.1	222.9	1,106.8	1,085.1	21.72	50.969		
4,600.0	4,474.4	4,456.0	4,426.0	19.9	11.6	-153.52	417.7	229.8	1,133.7	1,111.5	22.23	50.992		
4,700.0	4,571.2	4,552.3	4,521.6	20.4	11.9	-153.50	427.4	236.7	1,160.6	1,137.9	22.75	51.013		
4,800.0	4,668.0	4,648.6	4,617.1	20.9	12.2	-153.49	437.0	243.7	1,187.5	1,164.3	23.27	51.032		
4,900.0	4,764.7	4,744.9	4,712.7	21.4	12.4	-153.47	446.7	250.6	1,214.4	1,190.7	23.79	51.051		
5,000.0	4,861.5	4,841.2	4,808.3	21.8	12.7	-153.46	456.3	257.6	1,241.3	1,217.0	24.31	51.069		
5,100.0	4,958.3	4,937.5	4,903.9	22.3	13.0	-153.45	466.0	264.5	1,268.3	1,243.4	24.83	51.087		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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										D21 595 Pad - LR04A D21 595 - DD - Plan #2				Offset Site Error:		0.0 ft	
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
5,200.0	5,055.0	5,033.9	4,999.5	22.8	13.3	-153.43	475.6	271.4	1,295.2	1,269.8	25.34	51.103					
5,300.0	5,151.8	5,130.2	5,095.0	23.3	13.5	-153.42	485.3	278.4	1,322.1	1,296.2	25.86	51.119					
5,400.0	5,248.5	5,241.9	5,206.1	23.8	13.8	-153.47	495.2	285.5	1,348.5	1,322.1	26.37	51.133					
5,500.0	5,345.3	5,357.6	5,321.5	24.3	14.0	-153.70	501.9	290.3	1,373.6	1,346.8	26.80	51.258					
5,600.0	5,442.1	5,473.5	5,437.3	24.7	14.2	-154.11	504.7	292.3	1,397.5	1,370.3	27.13	51.501					

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR04B D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Total 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	-71.59	28.4	-85.4	90.0					
100.0	100.0	100.0	100.0	0.1	0.1	-71.59	28.4	-85.4	90.0	89.7	0.30	303.260		
200.0	200.0	200.0	200.0	0.3	0.3	-71.59	28.4	-85.4	90.0	89.3	0.65	139.336 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	119.36	28.4	-85.4	90.8	89.8	1.00	91.046		
400.0	399.9	399.0	399.0	0.7	0.7	150.27	30.1	-85.2	94.8	93.4	1.35	70.100		
500.0	499.6	497.3	497.2	0.9	0.9	164.75	35.2	-84.5	103.5	101.8	1.71	60.442		
600.0	598.9	594.4	593.9	1.2	1.1	174.61	43.4	-83.5	117.6	115.5	2.08	56.476		
700.0	697.9	689.9	688.7	1.5	1.3	-177.71	54.7	-82.0	137.4	134.9	2.46	55.762 SF		
800.0	796.3	783.4	781.1	1.8	1.6	-171.58	68.8	-80.3	162.9	160.0	2.86	57.020		
900.0	894.0	878.3	874.7	2.2	1.9	-166.96	84.6	-78.3	193.1	189.8	3.26	59.153		
1,000.0	991.0	972.3	967.3	2.6	2.2	-164.13	100.2	-76.3	226.6	222.9	3.69	61.449		
1,100.0	1,087.8	1,066.0	1,059.7	3.1	2.5	-162.74	115.9	-74.3	261.0	256.9	4.14	63.123		
1,200.0	1,184.5	1,159.7	1,152.1	3.6	2.8	-161.69	131.5	-72.3	295.6	291.0	4.59	64.358		
1,300.0	1,281.3	1,253.4	1,244.5	4.0	3.1	-160.85	147.1	-70.3	330.2	325.1	5.06	65.288		
1,400.0	1,378.0	1,347.2	1,336.9	4.5	3.4	-160.17	162.7	-68.4	364.8	359.3	5.53	66.004		
1,500.0	1,474.8	1,440.9	1,429.3	5.0	3.7	-159.61	178.3	-66.4	399.5	393.5	6.00	66.564		
1,600.0	1,571.6	1,534.6	1,521.6	5.5	4.0	-159.14	193.9	-64.4	434.2	427.8	6.48	67.010		
1,700.0	1,668.3	1,628.3	1,614.0	5.9	4.4	-158.73	209.5	-62.4	469.0	462.0	6.96	67.371		
1,800.0	1,765.1	1,722.0	1,706.4	6.4	4.7	-158.39	225.1	-60.5	503.7	496.3	7.44	67.667		
1,900.0	1,861.9	1,815.8	1,798.8	6.9	5.0	-158.09	240.8	-58.5	538.5	530.6	7.93	67.912		
2,000.0	1,958.6	1,909.5	1,891.2	7.4	5.3	-157.82	256.4	-56.5	573.3	564.9	8.42	68.119		
2,100.0	2,055.4	2,003.2	1,983.6	7.9	5.6	-157.59	272.0	-54.5	608.1	599.2	8.90	68.293		
2,200.0	2,152.1	2,096.9	2,076.0	8.3	5.9	-157.38	287.6	-52.5	642.9	633.5	9.39	68.443		
2,300.0	2,248.9	2,190.7	2,168.4	8.8	6.3	-157.19	303.2	-50.6	677.7	667.9	9.88	68.572		
2,400.0	2,345.7	2,284.4	2,260.8	9.3	6.6	-157.02	318.8	-48.6	712.6	702.2	10.37	68.684		
2,500.0	2,442.4	2,378.1	2,353.2	9.8	6.9	-156.87	334.4	-46.6	747.4	736.5	10.87	68.782		
2,600.0	2,539.2	2,471.8	2,445.6	10.3	7.2	-156.72	350.1	-44.6	782.2	770.9	11.36	68.868		
2,700.0	2,636.0	2,565.5	2,538.0	10.7	7.5	-156.60	365.7	-42.7	817.0	805.2	11.85	68.945		
2,800.0	2,732.7	2,659.3	2,630.3	11.2	7.9	-156.48	381.3	-40.7	851.9	839.5	12.34	69.013		
2,900.0	2,829.5	2,753.0	2,722.7	11.7	8.2	-156.37	396.9	-38.7	886.7	873.9	12.84	69.073		
3,000.0	2,926.2	2,846.7	2,815.1	12.2	8.5	-156.27	412.5	-36.7	921.6	908.2	13.33	69.128		
3,100.0	3,023.0	2,940.4	2,907.5	12.7	8.8	-156.18	428.1	-34.7	956.4	942.6	13.83	69.177		
3,200.0	3,119.8	3,034.2	2,999.9	13.2	9.1	-156.09	443.7	-32.8	991.2	976.9	14.32	69.222		
3,300.0	3,216.5	3,127.9	3,092.3	13.6	9.4	-156.01	459.3	-30.8	1,026.1	1,011.3	14.81	69.262		
3,400.0	3,313.3	3,221.6	3,184.7	14.1	9.8	-155.94	475.0	-28.8	1,060.9	1,045.6	15.31	69.299		
3,500.0	3,410.1	3,315.3	3,277.1	14.6	10.1	-155.86	490.6	-26.8	1,095.8	1,080.0	15.80	69.333		
3,600.0	3,506.8	3,409.0	3,369.5	15.1	10.4	-155.80	506.2	-24.9	1,130.6	1,114.3	16.30	69.364		
3,700.0	3,603.6	3,502.8	3,461.9	15.6	10.7	-155.74	521.8	-22.9	1,165.5	1,148.7	16.80	69.393		
3,800.0	3,700.3	3,596.5	3,554.3	16.0	11.0	-155.68	537.4	-20.9	1,200.4	1,183.1	17.29	69.419		
3,900.0	3,797.1	3,690.2	3,646.7	16.5	11.4	-155.62	553.0	-18.9	1,235.2	1,217.4	17.79	69.444		
4,000.0	3,893.9	3,783.9	3,739.0	17.0	11.7	-155.57	568.6	-16.9	1,270.1	1,251.8	18.28	69.466		
4,100.0	3,990.6	3,877.7	3,831.4	17.5	12.0	-155.52	584.3	-15.0	1,304.9	1,286.1	18.78	69.487		
4,200.0	4,087.4	3,971.4	3,923.8	18.0	12.3	-155.47	599.9	-13.0	1,339.8	1,320.5	19.28	69.507		
4,300.0	4,184.2	4,065.1	4,016.2	18.5	12.6	-155.43	615.5	-11.0	1,374.6	1,354.9	19.77	69.525		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR04C D21 595 (Existing) - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 140-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-71.69	43.0	-129.9	136.9					
100.0	100.0	96.7	96.7	0.1	0.2	-71.84	42.6	-129.8	136.6	136.3	0.30	448.419		
200.0	200.0	197.4	197.3	0.3	0.3	-72.30	41.3	-129.4	135.8	135.1	0.65	208.969		
277.0	277.0	274.7	274.7	0.5	0.5	117.56	39.8	-128.9	135.4	134.5	0.92	146.459 CC		
300.0	300.0	297.8	297.8	0.5	0.5	117.63	39.3	-128.8	135.4	134.4	1.01	134.603 ES		
400.0	399.9	398.0	397.9	0.7	0.7	146.18	36.9	-127.9	137.2	135.9	1.36	100.631		
500.0	499.6	498.0	497.9	0.9	0.9	157.00	35.0	-127.1	142.8	141.1	1.72	82.866		
600.0	598.9	598.4	598.2	1.2	1.1	162.20	31.7	-126.1	151.2	149.1	2.09	72.481		
700.0	697.9	699.2	699.0	1.5	1.2	165.04	27.1	-125.0	162.5	160.0	2.45	66.189		
800.0	796.3	800.9	800.5	1.8	1.5	166.72	21.4	-122.9	175.9	173.1	2.83	62.201		
900.0	894.0	902.9	902.2	2.2	1.7	167.90	14.9	-119.2	191.2	188.0	3.20	59.687		
1,000.0	991.0	1,004.8	1,003.7	2.6	1.9	168.72	8.2	-113.7	208.0	204.5	3.58	58.191		
1,100.0	1,087.8	1,106.3	1,104.7	3.1	2.1	169.00	1.6	-106.7	224.3	220.4	3.95	56.736		
1,200.0	1,184.5	1,200.7	1,198.7	3.6	2.3	169.24	-4.5	-100.0	240.5	236.2	4.32	55.686		
1,300.0	1,281.3	1,294.9	1,292.6	4.0	2.5	169.42	-10.1	-95.4	258.9	254.2	4.68	55.278		
1,400.0	1,378.0	1,390.0	1,387.5	4.5	2.7	169.57	-15.3	-91.9	278.5	273.4	5.05	55.168		
1,500.0	1,474.8	1,489.5	1,486.8	5.0	2.9	169.50	-21.6	-88.9	298.4	293.0	5.44	54.841		
1,600.0	1,571.6	1,588.3	1,585.2	5.5	3.1	169.27	-28.9	-85.8	317.9	312.0	5.83	54.555		
1,700.0	1,668.3	1,685.9	1,682.7	5.9	3.3	169.47	-34.0	-81.9	337.3	331.1	6.19	54.503 SF		
1,800.0	1,765.1	1,781.9	1,778.5	6.4	3.5	169.79	-38.0	-78.0	357.0	350.5	6.54	54.610		
1,900.0	1,861.9	1,874.2	1,870.6	6.9	3.7	170.09	-41.4	-75.2	377.9	371.0	6.88	54.918		
2,000.0	1,958.6	1,974.2	1,970.6	7.4	3.9	170.35	-45.0	-72.9	399.4	392.2	7.24	55.177		
2,100.0	2,055.4	2,074.9	2,071.2	7.9	4.1	170.56	-49.3	-69.7	420.0	412.4	7.60	55.253		
2,200.0	2,152.1	2,173.6	2,169.7	8.3	4.3	170.71	-53.7	-66.3	440.2	432.2	7.96	55.297		
2,300.0	2,248.9	2,270.9	2,266.8	8.8	4.5	170.89	-57.9	-62.9	460.4	452.1	8.31	55.383		
2,400.0	2,345.7	2,369.3	2,365.1	9.3	4.7	171.07	-61.8	-59.6	480.9	472.2	8.67	55.494		
2,500.0	2,442.4	2,465.1	2,460.8	9.8	4.9	171.25	-65.5	-56.1	501.2	492.2	9.01	55.608		
2,600.0	2,539.2	2,560.4	2,556.0	10.3	5.1	171.43	-68.9	-53.3	522.1	512.8	9.36	55.800		
2,700.0	2,636.0	2,657.7	2,653.2	10.7	5.2	171.65	-71.8	-50.4	543.4	533.7	9.70	56.018		
2,800.0	2,732.7	2,751.6	2,747.0	11.2	5.4	171.84	-74.5	-47.8	564.8	554.7	10.04	56.268		
2,900.0	2,829.5	2,849.3	2,844.7	11.7	5.6	172.08	-76.8	-45.3	586.6	576.3	10.37	56.547		
3,000.0	2,926.2	2,943.1	2,938.4	12.2	5.8	172.34	-78.4	-42.9	608.7	598.0	10.70	56.878		
3,100.0	3,023.0	3,040.6	3,035.9	12.7	5.9	172.57	-80.2	-40.8	631.1	620.1	11.04	57.184		
3,200.0	3,119.8	3,136.8	3,132.0	13.2	6.1	172.81	-81.7	-38.7	653.6	642.3	11.37	57.496		
3,300.0	3,216.5	3,231.4	3,226.6	13.6	6.3	172.98	-83.4	-37.1	676.5	664.8	11.70	57.802		
3,400.0	3,313.3	3,325.3	3,320.5	14.1	6.4	173.12	-85.3	-36.0	699.8	687.7	12.04	58.116		
3,500.0	3,410.1	3,423.9	3,419.0	14.6	6.6	173.24	-87.3	-35.2	723.3	710.9	12.39	58.399		
3,600.0	3,506.8	3,522.5	3,517.7	15.1	6.8	173.38	-89.1	-33.9	746.5	733.8	12.73	58.650		
3,700.0	3,603.6	3,615.1	3,610.2	15.6	6.9	173.46	-91.3	-33.1	769.9	756.8	13.07	58.903		
3,800.0	3,700.3	3,709.2	3,704.2	16.0	7.1	173.42	-94.7	-33.5	793.9	780.4	13.43	59.127		
3,900.0	3,797.1	3,803.6	3,798.6	16.5	7.3	173.37	-98.0	-34.1	818.1	804.3	13.78	59.357		
4,000.0	3,893.9	3,899.8	3,894.8	17.0	7.4	173.35	-101.2	-34.9	842.6	828.5	14.14	59.589		
4,100.0	3,990.6	3,995.7	3,990.6	17.5	7.6	173.35	-104.0	-35.5	867.2	852.7	14.49	59.832		
4,200.0	4,087.4	4,088.9	4,083.7	18.0	7.8	173.38	-106.1	-36.2	892.0	877.2	14.84	60.115		
4,300.0	4,184.2	4,187.3	4,182.1	18.5	7.9	173.42	-108.1	-37.1	917.0	901.9	15.19	60.376		
4,400.0	4,280.9	4,283.9	4,278.7	18.9	8.1	173.49	-109.8	-37.6	941.9	926.4	15.53	60.637		
4,500.0	4,377.7	4,379.5	4,374.3	19.4	8.2	173.57	-111.1	-38.0	966.9	951.0	15.87	60.914		
4,600.0	4,474.4	4,474.0	4,468.8	19.9	8.4	173.66	-112.2	-38.5	992.0	975.8	16.21	61.201		
4,700.0	4,571.2	4,567.9	4,562.7	20.4	8.6	173.75	-113.1	-39.2	1,017.4	1,000.8	16.54	61.500		
4,800.0	4,668.0	4,661.7	4,656.5	20.9	8.7	173.86	-113.4	-40.0	1,043.0	1,026.2	16.87	61.824		
4,900.0	4,764.7	4,757.8	4,752.6	21.4	8.9	174.00	-113.2	-40.7	1,068.9	1,051.7	17.20	62.141		
5,000.0	4,861.5	4,854.4	4,849.2	21.8	9.0	174.14	-112.9	-41.4	1,094.7	1,077.2	17.53	62.444		

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

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR04C D21 595 (Existing) - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 140-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	4,958.3	4,950.2	4,945.0	22.3	9.2	174.26	-112.7	-42.1	1,120.6	1,102.7	17.86	62.736		
5,200.0	5,055.0	5,044.9	5,039.7	22.8	9.3	174.37	-112.5	-42.9	1,146.6	1,128.4	18.19	63.030		
5,300.0	5,151.8	5,138.4	5,133.1	23.3	9.5	174.49	-112.2	-43.9	1,172.8	1,154.3	18.52	63.332		
5,400.0	5,248.5	5,234.1	5,228.9	23.8	9.6	174.60	-111.7	-45.1	1,199.2	1,180.3	18.85	63.621		
5,500.0	5,345.3	5,330.2	5,325.0	24.3	9.8	174.70	-111.3	-46.3	1,225.6	1,206.4	19.18	63.889		
5,600.0	5,442.1	5,425.9	5,420.6	24.7	9.9	174.76	-111.6	-47.9	1,252.0	1,232.5	19.52	64.129		
5,700.0	5,538.8	5,516.9	5,511.6	25.2	10.1	174.79	-112.4	-49.8	1,278.7	1,258.8	19.86	64.391		
5,800.0	5,635.6	5,622.5	5,617.2	25.7	10.3	174.81	-113.3	-52.2	1,305.4	1,285.2	20.22	64.557		
5,900.0	5,732.4	5,720.8	5,715.4	26.2	10.4	174.78	-115.6	-54.3	1,331.5	1,310.9	20.58	64.700		
6,000.0	5,829.1	5,813.8	5,808.4	26.7	10.6	174.76	-117.5	-56.3	1,357.7	1,336.7	20.92	64.883		
6,100.0	5,925.9	5,912.6	5,907.1	27.2	10.8	174.76	-119.0	-58.3	1,384.0	1,362.7	21.28	65.043		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR04D D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-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	-71.42	4.7	-14.1	14.9					
100.0	100.0	100.0	100.0	0.1	0.1	-71.42	4.7	-14.1	14.9	14.6	0.30	50.093		
200.0	200.0	200.0	200.0	0.3	0.3	-71.42	4.7	-14.1	14.9	14.2	0.65	23.016		
293.7	293.7	294.0	294.0	0.5	0.5	129.61	5.7	-12.4	14.6	13.6	0.98	14.898 CC		
300.0	300.0	300.3	300.3	0.5	0.5	131.16	5.8	-12.2	14.6	13.6	1.00	14.567 ES		
400.0	399.9	400.1	399.9	0.7	0.7	-173.77	9.0	-6.7	17.5	16.1	1.37	12.716 SF		
500.0	499.6	499.7	499.2	0.9	0.9	-150.66	12.6	-0.3	25.4	23.7	1.76	14.470		
600.0	598.9	599.1	598.3	1.2	1.1	-143.53	16.3	6.0	36.2	34.0	2.16	16.768		
700.0	697.9	698.2	697.2	1.5	1.3	-142.55	19.9	12.3	49.3	46.7	2.58	19.122		
800.0	796.3	797.0	795.7	1.8	1.5	-143.95	23.5	18.6	64.8	61.8	3.00	21.579		
900.0	894.0	895.2	893.6	2.2	1.8	-146.18	27.1	24.9	83.1	79.6	3.43	24.202		
1,000.0	991.0	992.8	990.9	2.6	2.0	-148.87	30.7	31.1	104.1	100.2	3.85	27.002		
1,100.0	1,087.8	1,090.2	1,088.1	3.1	2.2	-151.46	34.3	37.4	126.1	121.8	4.28	29.476		
1,200.0	1,184.5	1,187.6	1,185.2	3.6	2.4	-153.28	37.9	43.6	148.2	143.5	4.70	31.546		
1,300.0	1,281.3	1,285.0	1,282.4	4.0	2.6	-154.63	41.4	49.8	170.5	165.4	5.12	33.296		
1,400.0	1,378.0	1,382.5	1,379.6	4.5	2.8	-155.67	45.0	56.0	192.8	187.3	5.54	34.792		
1,500.0	1,474.8	1,479.9	1,476.7	5.0	3.0	-156.49	48.6	62.2	215.2	209.2	5.96	36.085		
1,600.0	1,571.6	1,577.3	1,573.9	5.5	3.2	-157.16	52.1	68.4	237.6	231.2	6.39	37.213		
1,700.0	1,668.3	1,674.7	1,671.0	5.9	3.4	-157.71	55.7	74.7	260.0	253.2	6.81	38.204		
1,800.0	1,765.1	1,772.1	1,768.2	6.4	3.6	-158.18	59.3	80.9	282.5	275.3	7.23	39.081		
1,900.0	1,861.9	1,869.6	1,865.3	6.9	3.9	-158.57	62.9	87.1	305.0	297.3	7.65	39.864		
2,000.0	1,958.6	1,967.0	1,962.5	7.4	4.1	-158.92	66.4	93.3	327.5	319.4	8.07	40.567		
2,100.0	2,055.4	2,064.4	2,059.7	7.9	4.3	-159.21	70.0	99.5	349.9	341.5	8.49	41.200		
2,200.0	2,152.1	2,161.8	2,156.8	8.3	4.5	-159.48	73.6	105.8	372.4	363.5	8.92	41.774		
2,300.0	2,248.9	2,259.3	2,254.0	8.8	4.7	-159.71	77.1	112.0	395.0	385.6	9.34	42.297		
2,400.0	2,345.7	2,356.7	2,351.1	9.3	4.9	-159.92	80.7	118.2	417.5	407.7	9.76	42.776		
2,500.0	2,442.4	2,454.1	2,448.3	9.8	5.1	-160.10	84.3	124.4	440.0	429.8	10.18	43.214		
2,600.0	2,539.2	2,551.5	2,545.4	10.3	5.3	-160.27	87.9	130.6	462.5	451.9	10.60	43.619		
2,700.0	2,636.0	2,648.9	2,642.6	10.7	5.5	-160.42	91.4	136.9	485.0	474.0	11.03	43.992		
2,800.0	2,732.7	2,746.4	2,739.8	11.2	5.8	-160.56	95.0	143.1	507.6	496.1	11.45	44.338		
2,900.0	2,829.5	2,843.8	2,836.9	11.7	6.0	-160.69	98.6	149.3	530.1	518.2	11.87	44.660		
3,000.0	2,926.2	2,941.2	2,934.1	12.2	6.2	-160.80	102.1	155.5	552.6	540.3	12.29	44.960		
3,100.0	3,023.0	3,038.6	3,031.2	12.7	6.4	-160.91	105.7	161.7	575.2	562.4	12.71	45.240		
3,200.0	3,119.8	3,136.1	3,128.4	13.2	6.6	-161.01	109.3	168.0	597.7	584.6	13.14	45.502		
3,300.0	3,216.5	3,233.5	3,225.6	13.6	6.8	-161.10	112.9	174.2	620.2	606.7	13.56	45.748		
3,400.0	3,313.3	3,330.9	3,322.7	14.1	7.0	-161.19	116.4	180.4	642.8	628.8	13.98	45.979		
3,500.0	3,410.1	3,428.3	3,419.9	14.6	7.2	-161.27	120.0	186.6	665.3	650.9	14.40	46.196		
3,600.0	3,506.8	3,525.7	3,517.0	15.1	7.4	-161.34	123.6	192.8	687.9	673.0	14.82	46.402		
3,700.0	3,603.6	3,623.2	3,614.2	15.6	7.7	-161.41	127.1	199.1	710.4	695.2	15.25	46.595		
3,800.0	3,700.3	3,720.6	3,711.3	16.0	7.9	-161.48	130.7	205.3	732.9	717.3	15.67	46.779		
3,900.0	3,797.1	3,818.0	3,808.5	16.5	8.1	-161.54	134.3	211.5	755.5	739.4	16.09	46.953		
4,000.0	3,893.9	3,915.4	3,905.7	17.0	8.3	-161.60	137.9	217.7	778.0	761.5	16.51	47.118		
4,100.0	3,990.6	4,012.9	4,002.8	17.5	8.5	-161.65	141.4	223.9	800.6	783.6	16.93	47.275		
4,200.0	4,087.4	4,110.3	4,100.0	18.0	8.7	-161.70	145.0	230.1	823.1	805.8	17.36	47.424		
4,300.0	4,184.2	4,207.7	4,197.1	18.5	8.9	-161.75	148.6	236.4	845.7	827.9	17.78	47.566		
4,400.0	4,280.9	4,305.1	4,294.3	18.9	9.1	-161.80	152.1	242.6	868.2	850.0	18.20	47.702		
4,500.0	4,377.7	4,402.5	4,391.4	19.4	9.3	-161.84	155.7	248.8	890.8	872.2	18.62	47.831		
4,600.0	4,474.4	4,500.0	4,488.6	19.9	9.6	-161.89	159.3	255.0	913.3	894.3	19.05	47.955		
4,700.0	4,571.2	4,597.4	4,585.8	20.4	9.8	-161.93	162.9	261.2	935.9	916.4	19.47	48.073		
4,800.0	4,668.0	4,694.8	4,682.9	20.9	10.0	-161.96	166.4	267.5	958.4	938.5	19.89	48.187		
4,900.0	4,764.7	4,792.2	4,780.1	21.4	10.2	-162.00	170.0	273.7	981.0	960.7	20.31	48.295		
5,000.0	4,861.5	4,889.7	4,877.2	21.8	10.4	-162.03	173.6	279.9	1,003.5	982.8	20.73	48.399		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR04D D21 595 - DD - Plan #2														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
5,100.0	4,958.3	4,987.1	4,974.4	22.3	10.6	-162.07	177.2	286.1	1,026.1	1,004.9	21.16	48.500			
5,200.0	5,055.0	5,084.5	5,071.6	22.8	10.8	-162.10	180.7	292.3	1,048.6	1,027.0	21.58	48.596			
5,300.0	5,151.8	5,181.9	5,168.7	23.3	11.0	-162.13	184.3	298.6	1,071.2	1,049.2	22.00	48.688			
5,400.0	5,248.5	5,279.3	5,265.9	23.8	11.2	-162.16	187.9	304.8	1,093.7	1,071.3	22.42	48.777			
5,500.0	5,345.3	5,370.0	5,356.3	24.3	11.4	-162.23	190.7	309.8	1,116.5	1,093.7	22.80	48.977			
5,600.0	5,442.1	5,457.6	5,443.9	24.7	11.6	-162.46	191.9	311.8	1,140.1	1,117.0	23.10	49.354			
5,700.0	5,538.8	5,551.7	5,538.0	25.2	11.7	-162.83	191.9	311.7	1,164.2	1,140.9	23.37	49.821			
5,800.0	5,635.6	5,647.6	5,633.9	25.7	11.8	-163.21	191.6	311.3	1,188.5	1,164.9	23.63	50.293			
5,900.0	5,732.4	5,744.3	5,730.6	26.2	12.0	-163.58	191.3	310.8	1,212.9	1,189.0	23.90	50.755			
6,000.0	5,829.1	5,841.0	5,827.2	26.7	12.1	-163.94	191.0	310.3	1,237.4	1,213.2	24.17	51.204			
6,100.0	5,925.9	5,937.6	5,923.9	27.2	12.2	-164.28	190.7	309.7	1,261.9	1,237.4	24.44	51.641			
6,200.0	6,022.7	6,034.3	6,020.6	27.6	12.4	-164.61	190.4	309.2	1,286.4	1,261.7	24.71	52.066			
6,300.0	6,119.4	6,131.0	6,117.3	28.1	12.5	-164.93	190.1	308.7	1,310.9	1,286.0	24.98	52.479			
6,400.0	6,216.2	6,227.7	6,214.0	28.6	12.6	-165.24	189.8	308.2	1,335.5	1,310.3	25.26	52.881			
6,500.0	6,312.9	6,324.4	6,310.6	29.1	12.8	-165.53	189.5	307.6	1,360.2	1,334.6	25.53	53.271			
6,600.0	6,409.7	6,421.0	6,407.3	29.6	12.9	-165.82	189.2	307.1	1,384.8	1,359.0	25.81	53.651			

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05A D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-71.54	14.2	-42.5	44.9					
100.0	100.0	100.0	100.0	0.1	0.1	-71.54	14.2	-42.5	44.9	44.6	0.30	151.180		
200.0	200.0	200.0	200.0	0.3	0.3	-71.54	14.2	-42.5	44.9	44.2	0.65	69.461 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	120.37	14.2	-42.5	45.7	44.7	1.00	45.829		
400.0	399.9	401.1	401.1	0.7	0.7	150.56	12.6	-41.9	48.1	46.7	1.35	35.490		
500.0	499.6	502.2	502.1	0.9	0.9	159.82	7.6	-39.9	51.5	49.7	1.72	29.918		
600.0	598.9	603.4	602.8	1.2	1.1	161.47	-0.7	-36.5	56.0	53.9	2.11	26.541		
700.0	697.9	703.3	702.1	1.5	1.3	160.28	-11.1	-32.3	62.6	60.1	2.53	24.779		
800.0	796.3	802.8	800.9	1.8	1.6	159.42	-21.5	-28.1	72.9	69.9	2.96	24.576 SF		
900.0	894.0	901.8	899.3	2.2	1.8	159.20	-31.9	-23.8	86.6	83.1	3.41	25.364		
1,000.0	991.0	1,000.3	997.2	2.6	2.1	159.26	-42.2	-19.7	103.5	99.6	3.87	26.761		
1,100.0	1,087.8	1,098.7	1,095.0	3.1	2.3	158.96	-52.5	-15.5	121.3	116.9	4.33	27.981		
1,200.0	1,184.5	1,197.1	1,192.8	3.6	2.6	158.74	-62.8	-11.3	139.1	134.3	4.80	28.942		
1,300.0	1,281.3	1,295.6	1,290.6	4.0	2.8	158.56	-73.1	-7.1	156.8	151.6	5.28	29.718		
1,400.0	1,378.0	1,394.0	1,388.3	4.5	3.1	158.42	-83.5	-2.9	174.6	168.9	5.75	30.355		
1,500.0	1,474.8	1,492.4	1,486.1	5.0	3.3	158.31	-93.8	1.3	192.4	186.2	6.23	30.888		
1,600.0	1,571.6	1,590.8	1,583.9	5.5	3.6	158.22	-104.1	5.5	210.2	203.5	6.71	31.340		
1,700.0	1,668.3	1,689.2	1,681.6	5.9	3.9	158.14	-114.4	9.7	228.0	220.8	7.19	31.727		
1,800.0	1,765.1	1,787.6	1,779.4	6.4	4.1	158.07	-124.7	13.8	245.8	238.1	7.67	32.062		
1,900.0	1,861.9	1,886.0	1,877.2	6.9	4.4	158.01	-135.0	18.0	263.5	255.4	8.15	32.356		
2,000.0	1,958.6	1,984.4	1,975.0	7.4	4.6	157.96	-145.4	22.2	281.3	272.7	8.63	32.615		
2,100.0	2,055.4	2,082.8	2,072.7	7.9	4.9	157.91	-155.7	26.4	299.1	290.0	9.11	32.845		
2,200.0	2,152.1	2,181.2	2,170.5	8.3	5.1	157.87	-166.0	30.6	316.9	307.3	9.59	33.050		
2,300.0	2,248.9	2,279.6	2,268.3	8.8	5.4	157.84	-176.3	34.8	334.7	324.6	10.07	33.235		
2,400.0	2,345.7	2,378.0	2,366.1	9.3	5.7	157.81	-186.6	39.0	352.5	341.9	10.55	33.402		
2,500.0	2,442.4	2,476.4	2,463.8	9.8	5.9	157.78	-196.9	43.1	370.3	359.2	11.03	33.553		
2,600.0	2,539.2	2,574.8	2,561.6	10.3	6.2	157.75	-207.2	47.3	388.0	376.5	11.52	33.692		
2,700.0	2,636.0	2,673.2	2,659.4	10.7	6.4	157.73	-217.6	51.5	405.8	393.8	12.00	33.818		
2,800.0	2,732.7	2,771.6	2,757.2	11.2	6.7	157.70	-227.9	55.7	423.6	411.1	12.48	33.935		
2,900.0	2,829.5	2,870.0	2,854.9	11.7	7.0	157.68	-238.2	59.9	441.4	428.4	12.97	34.042		
3,000.0	2,926.2	2,968.4	2,952.7	12.2	7.2	157.66	-248.5	64.1	459.2	445.7	13.45	34.141		
3,100.0	3,023.0	3,066.9	3,050.5	12.7	7.5	157.65	-258.8	68.3	477.0	463.0	13.93	34.233		
3,200.0	3,119.8	3,165.3	3,148.3	13.2	7.7	157.63	-269.1	72.5	494.8	480.3	14.42	34.319		
3,300.0	3,216.5	3,263.7	3,246.0	13.6	8.0	157.62	-279.4	76.6	512.5	497.6	14.90	34.399		
3,400.0	3,313.3	3,362.1	3,343.8	14.1	8.2	157.60	-289.8	80.8	530.3	514.9	15.38	34.474		
3,500.0	3,410.1	3,460.5	3,441.6	14.6	8.5	157.59	-300.1	85.0	548.1	532.2	15.87	34.544		
3,600.0	3,506.8	3,558.9	3,539.3	15.1	8.8	157.58	-310.4	89.2	565.9	549.5	16.35	34.609		
3,700.0	3,603.6	3,657.3	3,637.1	15.6	9.0	157.57	-320.7	93.4	583.7	566.9	16.84	34.671		
3,800.0	3,700.3	3,755.7	3,734.9	16.0	9.3	157.55	-331.0	97.6	601.5	584.2	17.32	34.729		
3,900.0	3,797.1	3,854.1	3,832.7	16.5	9.5	157.54	-341.3	101.8	619.3	601.5	17.80	34.784		
4,000.0	3,893.9	3,952.5	3,930.4	17.0	9.8	157.53	-351.7	105.9	637.0	618.8	18.29	34.836		
4,100.0	3,990.6	4,050.9	4,028.2	17.5	10.1	157.53	-362.0	110.1	654.8	636.1	18.77	34.885		
4,200.0	4,087.4	4,149.3	4,126.0	18.0	10.3	157.52	-372.3	114.3	672.6	653.4	19.26	34.931		
4,300.0	4,184.2	4,247.7	4,223.8	18.5	10.6	157.51	-382.6	118.5	690.4	670.7	19.74	34.976		
4,400.0	4,280.9	4,346.1	4,321.5	18.9	10.8	157.50	-392.9	122.7	708.2	688.0	20.22	35.018		
4,500.0	4,377.7	4,444.5	4,419.3	19.4	11.1	157.49	-403.2	126.9	726.0	705.3	20.71	35.058		
4,600.0	4,474.4	4,542.9	4,517.1	19.9	11.4	157.49	-413.5	131.1	743.8	722.6	21.19	35.096		
4,700.0	4,571.2	4,641.3	4,614.9	20.4	11.6	157.48	-423.9	135.2	761.5	739.9	21.68	35.132		
4,800.0	4,668.0	4,739.7	4,712.6	20.9	11.9	157.47	-434.2	139.4	779.3	757.2	22.16	35.167		
4,900.0	4,764.7	4,838.2	4,810.4	21.4	12.1	157.47	-444.5	143.6	797.1	774.5	22.65	35.200		
5,000.0	4,861.5	4,936.6	4,908.2	21.8	12.4	157.46	-454.8	147.8	814.9	791.8	23.13	35.232		
5,100.0	4,958.3	5,035.0	5,006.0	22.3	12.7	157.46	-465.1	152.0	832.7	809.1	23.61	35.262		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05A D21 595 - 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	5,055.0	5,133.4	5,103.7	22.8	12.9	157.45	-475.4	156.2	850.5	826.4	24.10	35.291		
5,300.0	5,151.8	5,231.8	5,201.5	23.3	13.2	157.45	-485.8	160.4	868.3	843.7	24.58	35.319		
5,400.0	5,248.5	5,330.2	5,299.3	23.8	13.4	157.44	-496.1	164.6	886.1	861.0	25.07	35.346		
5,500.0	5,345.3	5,428.6	5,397.1	24.3	13.7	157.44	-506.4	168.7	903.8	878.3	25.55	35.372		
5,600.0	5,442.1	5,527.0	5,494.8	24.7	13.9	157.43	-516.7	172.9	921.6	895.6	26.04	35.397		
5,700.0	5,538.8	5,625.4	5,592.6	25.2	14.2	157.43	-527.0	177.1	939.4	912.9	26.52	35.421		
5,800.0	5,635.6	5,723.8	5,690.4	25.7	14.5	157.42	-537.3	181.3	957.2	930.2	27.01	35.444		
5,900.0	5,732.4	5,822.2	5,788.1	26.2	14.7	157.42	-547.6	185.5	975.0	947.5	27.49	35.466		
6,000.0	5,829.1	5,920.6	5,885.9	26.7	15.0	157.41	-558.0	189.7	992.8	964.8	27.98	35.488		
6,100.0	5,925.9	6,019.0	5,983.7	27.2	15.2	157.41	-568.3	193.9	1,010.6	982.1	28.46	35.508		
6,200.0	6,022.7	6,117.4	6,081.5	27.6	15.5	157.41	-578.6	198.0	1,028.3	999.4	28.94	35.528		
6,300.0	6,119.4	6,215.8	6,179.2	28.1	15.8	157.40	-588.9	202.2	1,046.1	1,016.7	29.43	35.548		
6,400.0	6,216.2	6,314.2	6,277.0	28.6	16.0	157.40	-599.2	206.4	1,063.9	1,034.0	29.91	35.566		
6,500.0	6,312.9	6,412.6	6,374.8	29.1	16.3	157.40	-609.5	210.6	1,081.7	1,051.3	30.40	35.584		
6,600.0	6,409.7	6,511.0	6,472.6	29.6	16.5	157.39	-619.8	214.8	1,099.5	1,068.6	30.88	35.602		
6,700.0	6,506.5	6,609.5	6,570.3	30.1	16.8	157.39	-630.2	219.0	1,117.3	1,085.9	31.37	35.619		
6,800.0	6,603.2	6,707.9	6,668.1	30.5	17.1	157.39	-640.5	223.2	1,135.1	1,103.2	31.85	35.635		
6,900.0	6,700.0	6,806.3	6,765.9	31.0	17.3	157.38	-650.8	227.4	1,152.8	1,120.5	32.34	35.651		
7,000.0	6,796.8	6,904.7	6,863.7	31.5	17.6	157.38	-661.1	231.5	1,170.6	1,137.8	32.82	35.666		
7,100.0	6,893.5	7,003.1	6,961.4	32.0	17.8	157.38	-671.4	235.7	1,188.4	1,155.1	33.31	35.681		
7,200.0	6,990.3	7,101.5	7,059.2	32.5	18.1	157.38	-681.7	239.9	1,206.2	1,172.4	33.79	35.696		
7,300.0	7,087.0	7,199.9	7,157.0	33.0	18.4	157.37	-692.1	244.1	1,224.0	1,189.7	34.28	35.710		
7,400.0	7,183.8	7,298.3	7,254.8	33.4	18.6	157.37	-702.4	248.3	1,241.8	1,207.0	34.76	35.724		
7,500.0	7,280.6	7,396.7	7,352.5	33.9	18.9	157.37	-712.7	252.5	1,259.6	1,224.3	35.25	35.737		
7,600.0	7,377.3	7,495.1	7,450.3	34.4	19.1	157.37	-723.0	256.7	1,277.4	1,241.6	35.73	35.750		
7,700.0	7,474.1	7,593.5	7,548.1	34.9	19.4	157.36	-733.3	260.8	1,295.1	1,258.9	36.21	35.763		
7,800.0	7,570.9	7,691.9	7,645.8	35.4	19.7	157.36	-743.6	265.0	1,312.9	1,276.2	36.70	35.775		
7,900.0	7,667.6	7,790.3	7,743.6	35.9	19.9	157.36	-753.9	269.2	1,330.7	1,293.5	37.18	35.787		
8,000.0	7,764.4	7,888.7	7,841.4	36.3	20.2	157.36	-764.3	273.4	1,348.5	1,310.8	37.67	35.798		
8,100.0	7,861.1	7,987.1	7,939.2	36.8	20.4	157.36	-774.6	277.6	1,366.3	1,328.1	38.15	35.810		
8,200.0	7,957.9	8,085.5	8,036.9	37.3	20.7	157.35	-784.9	281.8	1,384.1	1,345.4	38.64	35.821		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05B D21 595 (Existing) - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 202-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	-67.91	57.2	-140.9	152.1					
100.0	100.0	94.8	94.8	0.1	0.2	-67.89	57.4	-141.2	152.4	152.1	0.30	500.183		
200.0	200.0	193.5	193.5	0.3	0.3	-67.85	57.9	-142.3	153.7	153.0	0.64	239.280		
300.0	300.0	293.0	293.0	0.5	0.5	122.71	58.8	-143.9	156.4	155.4	0.99	157.647		
400.0	399.9	391.9	391.8	0.7	0.7	151.57	59.2	-146.2	162.3	161.0	1.34	120.823		
500.0	499.6	493.1	493.0	0.9	0.9	162.03	58.5	-148.8	171.6	169.9	1.70	101.000		
600.0	598.9	597.4	597.2	1.2	1.0	166.80	55.6	-150.3	182.4	180.4	2.06	88.441		
700.0	697.9	700.3	700.0	1.5	1.2	168.87	49.7	-150.4	194.3	191.9	2.43	79.870		
800.0	796.3	803.2	802.5	1.8	1.4	169.56	41.4	-149.3	207.8	205.0	2.82	73.802		
900.0	894.0	904.9	903.8	2.2	1.6	169.76	32.1	-146.9	223.2	220.0	3.20	69.665		
1,000.0	991.0	1,005.8	1,004.2	2.6	1.9	169.64	22.7	-143.2	240.6	237.1	3.59	66.954		
1,100.0	1,087.8	1,107.6	1,105.5	3.1	2.1	169.20	13.8	-138.2	258.1	254.0	4.00	64.506		
1,200.0	1,184.5	1,209.7	1,206.9	3.6	2.3	168.75	4.1	-131.7	273.8	269.4	4.41	62.033		
1,300.0	1,281.3	1,309.9	1,306.3	4.0	2.6	168.17	-6.6	-124.9	288.9	284.0	4.84	59.685		
1,400.0	1,378.0	1,401.9	1,397.6	4.5	2.8	167.52	-17.0	-119.7	304.8	299.5	5.26	57.966		
1,500.0	1,474.8	1,499.7	1,494.8	5.0	3.0	167.06	-26.7	-115.2	322.1	316.4	5.68	56.699		
1,600.0	1,571.6	1,597.6	1,592.1	5.5	3.3	166.73	-36.0	-110.6	339.5	333.4	6.11	55.604		
1,700.0	1,668.3	1,695.0	1,689.0	5.9	3.5	166.47	-45.0	-106.2	357.2	350.7	6.53	54.736		
1,800.0	1,765.1	1,792.2	1,785.7	6.4	3.8	166.31	-53.4	-101.9	375.2	368.2	6.94	54.073		
1,900.0	1,861.9	1,890.2	1,883.2	6.9	4.0	166.03	-62.6	-98.1	393.4	386.0	7.38	53.296		
2,000.0	1,958.6	1,990.0	1,982.4	7.4	4.3	165.61	-73.3	-94.4	411.4	403.6	7.84	52.471		
2,100.0	2,055.4	2,090.7	2,082.3	7.9	4.5	165.02	-85.4	-90.4	428.9	420.6	8.34	51.425		
2,200.0	2,152.1	2,181.8	2,172.5	8.3	4.8	164.36	-97.6	-87.9	447.2	438.3	8.84	50.607		
2,300.0	2,248.9	2,283.0	2,272.7	8.8	5.1	163.63	-111.4	-85.5	465.8	456.5	9.37	49.691		
2,400.0	2,345.7	2,382.6	2,371.4	9.3	5.4	163.00	-124.7	-83.0	484.5	474.6	9.90	48.920		
2,500.0	2,442.4	2,501.2	2,488.8	9.8	5.7	162.47	-140.2	-76.0	499.9	489.5	10.47	47.741		
2,600.0	2,539.2	2,600.1	2,586.5	10.3	6.0	162.10	-152.9	-68.8	514.1	503.2	10.98	46.839		
2,700.0	2,636.0	2,695.6	2,681.1	10.7	6.3	161.83	-164.6	-61.9	528.6	517.1	11.46	46.114		
2,800.0	2,732.7	2,787.1	2,771.8	11.2	6.5	161.62	-175.2	-56.1	544.1	532.2	11.94	45.581		
2,900.0	2,829.5	2,873.7	2,857.6	11.7	6.8	161.33	-186.0	-52.2	561.2	548.8	12.42	45.175		
3,000.0	2,926.2	2,981.0	2,963.9	12.2	7.1	160.85	-200.6	-48.0	578.6	565.6	13.00	44.510 SF		
3,100.0	3,023.0	3,013.0	2,995.6	12.7	7.2	160.75	-204.6	-46.7	599.4	586.1	13.32	44.988		
3,200.0	3,119.8	3,013.0	2,995.6	13.2	7.2	160.75	-204.6	-46.7	634.4	620.9	13.55	46.809		
3,300.0	3,216.5	3,013.0	2,995.6	13.6	7.2	160.75	-204.6	-46.7	682.4	668.6	13.78	49.512		
3,400.0	3,313.3	3,013.0	2,995.6	14.1	7.2	160.75	-204.6	-46.7	740.9	726.9	14.01	52.872		
3,500.0	3,410.1	3,013.0	2,995.6	14.6	7.2	160.75	-204.6	-46.7	807.5	793.3	14.24	56.699		
3,600.0	3,506.8	3,013.0	2,995.6	15.1	7.2	160.75	-204.6	-46.7	880.5	866.0	14.47	60.843		
3,700.0	3,603.6	3,013.0	2,995.6	15.6	7.2	160.75	-204.6	-46.7	958.4	943.7	14.70	65.189		
3,800.0	3,700.3	3,013.0	2,995.6	16.0	7.2	160.75	-204.6	-46.7	1,040.1	1,025.1	14.93	69.655		
3,900.0	3,797.1	3,013.0	2,995.6	16.5	7.2	160.75	-204.6	-46.7	1,124.7	1,109.5	15.16	74.181		
4,000.0	3,893.9	3,013.0	2,995.6	17.0	7.2	160.75	-204.6	-46.7	1,211.7	1,196.3	15.39	78.724		
4,100.0	3,990.6	3,013.0	2,995.6	17.5	7.2	160.75	-204.6	-46.7	1,300.5	1,284.9	15.62	83.253		
4,200.0	4,087.4	3,013.0	2,995.6	18.0	7.2	160.75	-204.6	-46.7	1,390.9	1,375.0	15.85	87.747		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05BDR D21-595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Total 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	-71.59	37.9	-113.8	120.0					
100.0	100.0	100.0	100.0	0.1	0.2	-71.59	37.9	-113.8	120.0	119.6	0.32	371.562		
200.0	200.0	200.0	200.0	0.3	0.3	-71.59	37.9	-113.8	120.0	119.3	0.67	178.543		
300.0	300.0	302.2	302.2	0.5	0.5	118.41	36.1	-113.4	119.9	118.9	1.03	116.336		
309.4	309.4	311.8	311.7	0.5	0.5	122.63	35.8	-113.4	119.9	118.8	1.07	112.469 CC, ES		
400.0	399.9	404.3	404.2	0.7	0.7	145.74	30.8	-112.3	120.6	119.2	1.41	85.765		
500.0	499.6	506.3	505.7	0.9	1.0	153.85	21.9	-110.4	123.0	121.2	1.81	67.994		
600.0	598.9	606.2	605.0	1.2	1.2	156.29	11.2	-108.1	128.1	125.9	2.23	57.435		
700.0	697.9	705.7	704.0	1.5	1.4	157.19	0.6	-105.8	136.8	134.2	2.67	51.306		
800.0	796.3	804.9	802.6	1.8	1.7	157.64	-10.1	-103.5	149.0	145.9	3.12	47.842		
900.0	894.0	903.7	900.7	2.2	1.9	158.03	-20.6	-101.2	164.6	161.1	3.57	46.092		
1,000.0	991.0	1,001.9	998.3	2.6	2.2	158.27	-31.1	-98.9	183.5	179.4	4.04	45.443		
1,100.0	1,087.8	1,099.9	1,095.8	3.1	2.4	158.03	-41.6	-96.6	203.1	198.6	4.51	44.981		
1,200.0	1,184.5	1,198.0	1,193.2	3.6	2.7	157.83	-52.1	-94.4	222.7	217.7	5.00	44.578		
1,300.0	1,281.3	1,296.0	1,290.7	4.0	2.9	157.66	-62.6	-92.1	242.4	236.9	5.48	44.224		
1,400.0	1,378.0	1,394.1	1,388.2	4.5	3.2	157.52	-73.1	-89.8	262.0	256.0	5.97	43.913		
1,500.0	1,474.8	1,492.1	1,485.6	5.0	3.4	157.40	-83.6	-87.5	281.6	275.2	6.45	43.639		
1,600.0	1,571.6	1,590.2	1,583.1	5.5	3.7	157.29	-94.1	-85.3	301.3	294.3	6.94	43.395		
1,700.0	1,668.3	1,688.2	1,680.5	5.9	4.0	157.20	-104.6	-83.0	320.9	313.5	7.43	43.176		
1,800.0	1,765.1	1,786.3	1,778.0	6.4	4.2	157.12	-115.1	-80.7	340.6	332.6	7.92	42.981		
1,900.0	1,861.9	1,884.3	1,875.5	6.9	4.5	157.04	-125.6	-78.5	360.2	351.8	8.42	42.804		
2,000.0	1,958.6	1,982.4	1,972.9	7.4	4.7	156.98	-136.1	-76.2	379.8	370.9	8.91	42.644		
2,100.0	2,055.4	2,080.4	2,070.4	7.9	5.0	156.92	-146.6	-73.9	399.5	390.1	9.40	42.498		
2,200.0	2,152.1	2,178.5	2,167.9	8.3	5.2	156.86	-157.1	-71.7	419.1	409.2	9.89	42.365		
2,300.0	2,248.9	2,276.5	2,265.3	8.8	5.5	156.81	-167.6	-69.4	438.8	428.4	10.39	42.243		
2,400.0	2,345.7	2,374.6	2,362.8	9.3	5.7	156.77	-178.1	-67.1	458.4	447.5	10.88	42.131		
2,500.0	2,442.4	2,472.6	2,460.2	9.8	6.0	156.73	-188.6	-64.8	478.1	466.7	11.38	42.027		
2,600.0	2,539.2	2,570.7	2,557.7	10.3	6.2	156.69	-199.1	-62.6	497.7	485.8	11.87	41.931		
2,700.0	2,636.0	2,668.7	2,655.2	10.7	6.5	156.65	-209.6	-60.3	517.4	505.0	12.36	41.842		
2,800.0	2,732.7	2,766.8	2,752.6	11.2	6.7	156.62	-220.1	-58.0	537.0	524.1	12.86	41.759		
2,900.0	2,829.5	2,864.8	2,850.1	11.7	7.0	156.59	-230.6	-55.8	556.6	543.3	13.35	41.682		
3,000.0	2,926.2	2,962.9	2,947.5	12.2	7.2	156.56	-241.1	-53.5	576.3	562.4	13.85	41.610		
3,100.0	3,023.0	3,061.0	3,045.0	12.7	7.5	156.54	-251.6	-51.2	595.9	581.6	14.35	41.542		
3,200.0	3,119.8	3,159.0	3,142.5	13.2	7.8	156.51	-262.1	-49.0	615.6	600.7	14.84	41.479		
3,300.0	3,216.5	3,257.1	3,239.9	13.6	8.0	156.49	-272.6	-46.7	635.2	619.9	15.34	41.419		
3,400.0	3,313.3	3,355.1	3,337.4	14.1	8.3	156.47	-283.1	-44.4	654.9	639.0	15.83	41.363		
3,500.0	3,410.1	3,453.2	3,434.8	14.6	8.5	156.45	-293.5	-42.1	674.5	658.2	16.33	41.310		
3,600.0	3,506.8	3,551.2	3,532.3	15.1	8.8	156.43	-304.0	-39.9	694.2	677.3	16.82	41.260		
3,700.0	3,603.6	3,649.3	3,629.8	15.6	9.0	156.41	-314.5	-37.6	713.8	696.5	17.32	41.212		
3,800.0	3,700.3	3,747.3	3,727.2	16.0	9.3	156.39	-325.0	-35.3	733.5	715.7	17.82	41.167		
3,900.0	3,797.1	3,845.4	3,824.7	16.5	9.5	156.38	-335.5	-33.1	753.1	734.8	18.31	41.124		
4,000.0	3,893.9	3,943.4	3,922.1	17.0	9.8	156.36	-346.0	-30.8	772.8	754.0	18.81	41.084		
4,100.0	3,990.6	4,041.5	4,019.6	17.5	10.0	156.35	-356.5	-28.5	792.4	773.1	19.31	41.045		
4,200.0	4,087.4	4,139.5	4,117.1	18.0	10.3	156.33	-367.0	-26.2	812.1	792.3	19.80	41.008		
4,300.0	4,184.2	4,237.6	4,214.5	18.5	10.5	156.32	-377.5	-24.0	831.7	811.4	20.30	40.973		
4,400.0	4,280.9	4,335.6	4,312.0	18.9	10.8	156.31	-388.0	-21.7	851.3	830.6	20.80	40.939		
4,500.0	4,377.7	4,433.7	4,409.5	19.4	11.0	156.29	-398.5	-19.4	871.0	849.7	21.29	40.907		
4,600.0	4,474.4	4,531.7	4,506.9	19.9	11.3	156.28	-409.0	-17.2	890.6	868.9	21.79	40.876		
4,700.0	4,571.2	4,629.8	4,604.4	20.4	11.6	156.27	-419.5	-14.9	910.3	888.0	22.29	40.847		
4,800.0	4,668.0	4,727.8	4,701.8	20.9	11.8	156.26	-430.0	-12.6	929.9	907.2	22.78	40.819		
4,900.0	4,764.7	4,825.9	4,799.3	21.4	12.1	156.25	-440.5	-10.4	949.6	926.3	23.28	40.792		
5,000.0	4,861.5	4,923.9	4,896.8	21.8	12.3	156.24	-451.0	-8.1	969.2	945.5	23.78	40.766		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05BDR D21-595 - 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		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
5,100.0	4,958.3	5,022.0	4,994.2	22.3	12.6	156.23	-461.5	-5.8	988.9	964.6	24.27	40.741		
5,200.0	5,055.0	5,120.0	5,091.7	22.8	12.8	156.22	-472.0	-3.5	1,008.5	983.8	24.77	40.717 SF		
5,300.0	5,151.8	5,210.9	5,182.1	23.3	13.0	156.25	-481.1	-1.6	1,028.4	1,003.2	25.22	40.772		
5,400.0	5,248.5	5,300.0	5,270.9	23.8	13.2	156.41	-487.5	-0.2	1,049.2	1,023.6	25.60	40.988		
5,500.0	5,345.3	5,384.7	5,355.6	24.3	13.3	156.69	-491.0	0.6	1,071.1	1,045.2	25.90	41.358		
5,600.0	5,442.1	5,471.0	5,441.9	24.7	13.5	157.10	-492.1	0.8	1,094.0	1,067.8	26.14	41.844		
5,700.0	5,538.8	5,564.2	5,535.1	25.2	13.6	157.58	-492.2	0.6	1,117.5	1,091.2	26.38	42.371		
5,800.0	5,635.6	5,659.2	5,630.0	25.7	13.7	158.03	-492.5	0.2	1,141.5	1,114.9	26.61	42.892		
5,900.0	5,732.4	5,755.9	5,726.7	26.2	13.8	158.47	-492.8	-0.4	1,165.5	1,138.6	26.85	43.402		
6,000.0	5,829.1	5,852.6	5,823.4	26.7	13.9	158.90	-493.1	-0.9	1,189.6	1,162.5	27.10	43.901		
6,100.0	5,925.9	5,949.2	5,920.1	27.2	14.1	159.31	-493.4	-1.4	1,213.7	1,186.4	27.34	44.390		
6,200.0	6,022.7	6,045.9	6,016.8	27.6	14.2	159.70	-493.7	-1.9	1,237.9	1,210.3	27.59	44.867		
6,300.0	6,119.4	6,142.6	6,113.4	28.1	14.3	160.08	-494.0	-2.5	1,262.2	1,234.3	27.84	45.334		
6,400.0	6,216.2	6,239.3	6,210.1	28.6	14.5	160.44	-494.3	-3.0	1,286.5	1,258.4	28.09	45.791		
6,500.0	6,312.9	6,336.0	6,306.8	29.1	14.6	160.79	-494.6	-3.5	1,310.8	1,282.5	28.35	46.237		
6,600.0	6,409.7	6,432.7	6,403.5	29.6	14.7	161.13	-494.9	-4.0	1,335.2	1,306.6	28.61	46.673		
6,700.0	6,506.5	6,529.3	6,500.2	30.1	14.8	161.46	-495.2	-4.6	1,359.6	1,330.8	28.87	47.099		
6,800.0	6,603.2	6,626.0	6,596.9	30.5	15.0	161.77	-495.5	-5.1	1,384.1	1,355.0	29.13	47.515		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05C D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-71.56	23.7	-71.0	74.8					
100.0	100.0	100.0	100.0	0.1	0.1	-71.56	23.7	-71.0	74.8	74.6	0.30	252.266		
200.0	200.0	200.0	200.0	0.3	0.3	-71.56	23.7	-71.0	74.8	74.2	0.65	115.906		
300.0	300.0	301.6	301.6	0.5	0.5	118.54	22.0	-70.4	74.6	73.6	1.00	74.386		
335.6	335.6	337.8	337.7	0.6	0.6	132.31	20.5	-69.9	74.5	73.4	1.14	65.605 CC, ES		
400.0	399.9	403.2	403.0	0.7	0.7	145.75	16.9	-68.7	74.8	73.4	1.38	54.392		
500.0	499.6	504.6	504.1	0.9	0.9	153.14	8.3	-65.8	76.5	74.7	1.78	43.042		
600.0	598.9	605.9	604.5	1.2	1.2	153.74	-3.5	-61.8	79.9	77.7	2.23	35.864		
700.0	697.9	706.1	703.5	1.5	1.5	151.57	-18.1	-56.9	85.7	83.0	2.74	31.346		
800.0	796.3	805.4	801.7	1.8	1.8	149.67	-32.8	-52.0	95.3	92.0	3.28	29.048		
900.0	894.0	904.5	899.5	2.2	2.1	148.62	-47.6	-47.0	108.2	104.4	3.85	28.124		
1,000.0	991.0	1,003.2	997.0	2.6	2.4	148.16	-62.2	-42.0	124.3	119.9	4.43	28.043		
1,100.0	1,087.8	1,101.7	1,094.3	3.1	2.7	147.50	-76.9	-37.1	141.2	136.2	5.03	28.055		
1,200.0	1,184.5	1,200.3	1,191.6	3.6	3.1	146.98	-91.5	-32.2	158.1	152.5	5.64	28.030		
1,300.0	1,281.3	1,298.8	1,289.0	4.0	3.4	146.56	-106.1	-27.2	175.0	168.8	6.25	27.988		
1,400.0	1,378.0	1,397.4	1,386.3	4.5	3.7	146.22	-120.8	-22.3	191.9	185.1	6.87	27.939		
1,500.0	1,474.8	1,495.9	1,483.6	5.0	4.0	145.93	-135.4	-17.4	208.9	201.4	7.49	27.887		
1,600.0	1,571.6	1,594.5	1,581.0	5.5	4.3	145.68	-150.1	-12.4	225.8	217.7	8.11	27.835		
1,700.0	1,668.3	1,693.0	1,678.3	5.9	4.6	145.47	-164.7	-7.5	242.7	234.0	8.74	27.785		
1,800.0	1,765.1	1,791.6	1,775.6	6.4	5.0	145.29	-179.3	-2.6	259.7	250.3	9.36	27.737		
1,900.0	1,861.9	1,890.2	1,873.0	6.9	5.3	145.12	-194.0	2.4	276.6	266.6	9.99	27.693		
2,000.0	1,958.6	1,988.7	1,970.3	7.4	5.6	144.98	-208.6	7.3	293.5	282.9	10.62	27.651		
2,100.0	2,055.4	2,087.3	2,067.6	7.9	5.9	144.85	-223.3	12.3	310.5	299.2	11.24	27.611		
2,200.0	2,152.1	2,185.8	2,165.0	8.3	6.2	144.74	-237.9	17.2	327.4	315.5	11.87	27.575		
2,300.0	2,248.9	2,284.4	2,262.3	8.8	6.6	144.64	-252.5	22.1	344.3	331.8	12.50	27.540		
2,400.0	2,345.7	2,382.9	2,359.6	9.3	6.9	144.54	-267.2	27.1	361.3	348.2	13.13	27.508		
2,500.0	2,442.4	2,481.5	2,457.0	9.8	7.2	144.46	-281.8	32.0	378.2	364.5	13.77	27.478		
2,600.0	2,539.2	2,580.0	2,554.3	10.3	7.5	144.38	-296.5	36.9	395.2	380.8	14.40	27.450		
2,700.0	2,636.0	2,678.6	2,651.6	10.7	7.8	144.31	-311.1	41.9	412.1	397.1	15.03	27.424		
2,800.0	2,732.7	2,777.1	2,749.0	11.2	8.2	144.25	-325.7	46.8	429.1	413.4	15.66	27.399		
2,900.0	2,829.5	2,875.7	2,846.3	11.7	8.5	144.18	-340.4	51.7	446.0	429.7	16.29	27.376		
3,000.0	2,926.2	2,974.2	2,943.6	12.2	8.8	144.13	-355.0	56.7	463.0	446.0	16.93	27.354		
3,100.0	3,023.0	3,072.8	3,041.0	12.7	9.1	144.08	-369.7	61.6	479.9	462.4	17.56	27.333		
3,200.0	3,119.8	3,171.3	3,138.3	13.2	9.4	144.03	-384.3	66.6	496.9	478.7	18.19	27.314		
3,300.0	3,216.5	3,269.9	3,235.6	13.6	9.7	143.98	-398.9	71.5	513.8	495.0	18.82	27.296		
3,400.0	3,313.3	3,368.4	3,333.0	14.1	10.1	143.94	-413.6	76.4	530.8	511.3	19.46	27.278		
3,500.0	3,410.1	3,467.0	3,430.3	14.6	10.4	143.90	-428.2	81.4	547.7	527.6	20.09	27.262		
3,600.0	3,506.8	3,565.5	3,527.6	15.1	10.7	143.86	-442.9	86.3	564.7	543.9	20.72	27.246		
3,700.0	3,603.6	3,664.1	3,625.0	15.6	11.0	143.83	-457.5	91.2	581.6	560.2	21.36	27.231		
3,800.0	3,700.3	3,762.6	3,722.3	16.0	11.3	143.79	-472.1	96.2	598.6	576.6	21.99	27.217		
3,900.0	3,797.1	3,861.2	3,819.6	16.5	11.7	143.76	-486.8	101.1	615.5	592.9	22.63	27.204		
4,000.0	3,893.9	3,959.8	3,917.0	17.0	12.0	143.73	-501.4	106.1	632.5	609.2	23.26	27.191		
4,100.0	3,990.6	4,058.3	4,014.3	17.5	12.3	143.70	-516.1	111.0	649.4	625.5	23.89	27.179		
4,200.0	4,087.4	4,156.9	4,111.6	18.0	12.6	143.68	-530.7	115.9	666.4	641.8	24.53	27.167		
4,300.0	4,184.2	4,255.4	4,209.0	18.5	12.9	143.65	-545.4	120.9	683.3	658.1	25.16	27.156		
4,400.0	4,280.9	4,354.0	4,306.3	18.9	13.3	143.63	-560.0	125.8	700.3	674.5	25.80	27.145		
4,500.0	4,377.7	4,452.5	4,403.6	19.4	13.6	143.61	-574.6	130.7	717.2	690.8	26.43	27.135		
4,600.0	4,474.4	4,551.1	4,501.0	19.9	13.9	143.58	-589.3	135.7	734.2	707.1	27.07	27.125		
4,700.0	4,571.2	4,649.6	4,598.3	20.4	14.2	143.56	-603.9	140.6	751.1	723.4	27.70	27.116		
4,800.0	4,668.0	4,748.2	4,695.7	20.9	14.5	143.54	-618.6	145.5	768.1	739.7	28.33	27.107		
4,900.0	4,764.7	4,846.7	4,793.0	21.4	14.9	143.52	-633.2	150.5	785.0	756.0	28.97	27.098		
5,000.0	4,861.5	4,945.3	4,890.3	21.8	15.2	143.50	-647.8	155.4	802.0	772.4	29.60	27.090		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05C D21 595 - 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		
5,100.0	4,958.3	5,043.8	4,987.7	22.3	15.5	143.49	-662.5	160.4	818.9	788.7	30.24	27.082		
5,200.0	5,055.0	5,142.4	5,085.0	22.8	15.8	143.47	-677.1	165.3	835.9	805.0	30.87	27.074		
5,300.0	5,151.8	5,240.9	5,182.3	23.3	16.1	143.45	-691.8	170.2	852.8	821.3	31.51	27.067		
5,400.0	5,248.5	5,339.5	5,279.7	23.8	16.5	143.44	-706.4	175.2	869.8	837.6	32.14	27.059		
5,500.0	5,345.3	5,438.0	5,377.0	24.3	16.8	143.42	-721.0	180.1	886.7	853.9	32.78	27.052		
5,600.0	5,442.1	5,536.6	5,474.3	24.7	17.1	143.41	-735.7	185.0	903.7	870.3	33.41	27.046		
5,700.0	5,538.8	5,635.1	5,571.7	25.2	17.4	143.39	-750.3	190.0	920.6	886.6	34.05	27.039		
5,800.0	5,635.6	5,733.7	5,669.0	25.7	17.7	143.38	-765.0	194.9	937.6	902.9	34.68	27.033		
5,900.0	5,732.4	5,832.3	5,766.3	26.2	18.1	143.37	-779.6	199.8	954.5	919.2	35.32	27.027		
6,000.0	5,829.1	5,930.8	5,863.7	26.7	18.4	143.36	-794.2	204.8	971.5	935.5	35.95	27.021		
6,100.0	5,925.9	6,029.4	5,961.0	27.2	18.7	143.34	-808.9	209.7	988.4	951.8	36.59	27.016		
6,200.0	6,022.7	6,127.9	6,058.3	27.6	19.0	143.33	-823.5	214.7	1,005.4	968.2	37.22	27.010		
6,300.0	6,119.4	6,226.5	6,155.7	28.1	19.3	143.32	-838.2	219.6	1,022.3	984.5	37.86	27.005		
6,400.0	6,216.2	6,325.0	6,253.0	28.6	19.7	143.31	-852.8	224.5	1,039.3	1,000.8	38.49	27.000		
6,500.0	6,312.9	6,423.6	6,350.3	29.1	20.0	143.30	-867.4	229.5	1,056.2	1,017.1	39.13	26.995		
6,600.0	6,409.7	6,522.1	6,447.7	29.6	20.3	143.29	-882.1	234.4	1,073.2	1,033.4	39.76	26.990		
6,700.0	6,506.5	6,620.7	6,545.0	30.1	20.6	143.28	-896.7	239.3	1,090.1	1,049.7	40.40	26.985		
6,800.0	6,603.2	6,719.2	6,642.3	30.5	20.9	143.27	-911.4	244.3	1,107.1	1,066.1	41.03	26.981		
6,900.0	6,700.0	6,817.8	6,739.7	31.0	21.3	143.26	-926.0	249.2	1,124.0	1,082.4	41.67	26.976		
7,000.0	6,796.8	6,916.3	6,837.0	31.5	21.6	143.25	-940.6	254.1	1,141.0	1,098.7	42.30	26.972		
7,100.0	6,893.5	7,014.9	6,934.3	32.0	21.9	143.24	-955.3	259.1	1,157.9	1,115.0	42.94	26.968		
7,200.0	6,990.3	7,113.4	7,031.7	32.5	22.2	143.23	-969.9	264.0	1,174.9	1,131.3	43.57	26.964		
7,300.0	7,087.0	7,212.0	7,129.0	33.0	22.5	143.23	-984.6	269.0	1,191.8	1,147.6	44.21	26.960		
7,400.0	7,183.8	7,310.5	7,226.3	33.4	22.9	143.22	-999.2	273.9	1,208.8	1,164.0	44.84	26.956		
7,500.0	7,280.6	7,409.1	7,323.7	33.9	23.2	143.21	-1,013.8	278.8	1,225.7	1,180.3	45.48	26.952		
7,600.0	7,377.3	7,507.6	7,421.0	34.4	23.5	143.20	-1,028.5	283.8	1,242.7	1,196.6	46.11	26.948		
7,700.0	7,474.1	7,606.2	7,518.3	34.9	23.8	143.19	-1,043.1	288.7	1,259.7	1,212.9	46.75	26.945		
7,800.0	7,570.9	7,704.8	7,615.7	35.4	24.1	143.19	-1,057.8	293.6	1,276.6	1,229.2	47.38	26.941		
7,900.0	7,667.6	7,803.3	7,713.0	35.9	24.5	143.18	-1,072.4	298.6	1,293.6	1,245.5	48.02	26.938		
8,000.0	7,764.4	7,901.9	7,810.3	36.3	24.8	143.17	-1,087.1	303.5	1,310.5	1,261.9	48.66	26.935		
8,100.0	7,861.1	8,000.4	7,907.7	36.8	25.1	143.17	-1,101.7	308.5	1,327.5	1,278.2	49.29	26.931		
8,200.0	7,957.9	8,099.0	8,005.0	37.3	25.4	143.16	-1,116.3	313.4	1,344.4	1,294.5	49.93	26.928		
8,300.0	8,054.7	8,197.5	8,102.3	37.8	25.7	143.15	-1,131.0	318.3	1,361.4	1,310.8	50.56	26.925		
8,400.0	8,151.5	8,296.1	8,199.7	38.3	26.1	143.21	-1,145.6	323.3	1,378.1	1,326.9	51.20	26.917		
8,500.0	8,248.9	8,395.0	8,297.4	38.7	26.4	143.31	-1,160.3	328.2	1,392.8	1,340.9	51.84	26.866 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05D D21 595 - DD - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-71.57	33.1	-99.5	104.8					
100.0	100.0	100.0	100.0	0.1	0.1	-71.57	33.1	-99.5	104.8	104.5	0.30	353.353		
200.0	200.0	200.0	200.0	0.3	0.3	-71.57	33.1	-99.5	104.8	104.2	0.65	162.351		
300.0	300.0	301.9	301.8	0.5	0.5	118.43	31.4	-99.1	104.8	103.8	1.00	104.372		
306.2	306.2	308.2	308.2	0.5	0.5	121.29	31.1	-99.1	104.8	103.8	1.03	101.975	CC, ES	
400.0	399.9	403.7	403.5	0.7	0.7	145.65	26.1	-98.0	105.5	104.2	1.38	76.513		
500.0	499.6	505.3	504.8	0.9	0.9	153.48	17.2	-96.2	108.1	106.3	1.79	60.552		
600.0	598.9	606.7	605.3	1.2	1.2	154.88	4.9	-93.8	112.8	110.6	2.24	50.334		
700.0	697.9	707.6	704.9	1.5	1.5	153.36	-10.8	-90.6	120.1	117.3	2.77	43.395		
800.0	796.3	806.9	802.6	1.8	1.9	150.81	-28.8	-87.0	130.4	127.1	3.35	38.953		
900.0	894.0	905.7	899.6	2.2	2.2	148.84	-46.8	-83.3	144.5	140.6	3.96	36.460		
1,000.0	991.0	1,004.0	996.2	2.6	2.6	147.39	-64.7	-79.7	162.0	157.4	4.61	35.149		
1,100.0	1,087.8	1,102.2	1,092.7	3.1	2.9	145.87	-82.6	-76.1	180.3	175.0	5.28	34.174		
1,200.0	1,184.5	1,200.4	1,189.2	3.6	3.3	144.64	-100.5	-72.5	198.8	192.8	5.96	33.365		
1,300.0	1,281.3	1,298.6	1,285.7	4.0	3.6	143.62	-118.4	-68.9	217.3	210.6	6.65	32.687		
1,400.0	1,378.0	1,396.8	1,382.2	4.5	4.0	142.75	-136.2	-65.3	235.9	228.5	7.34	32.113		
1,500.0	1,474.8	1,495.0	1,478.6	5.0	4.3	142.02	-154.1	-61.7	254.5	246.4	8.05	31.624		
1,600.0	1,571.6	1,593.2	1,575.1	5.5	4.7	141.38	-172.0	-58.0	273.1	264.4	8.75	31.202		
1,700.0	1,668.3	1,691.4	1,671.6	5.9	5.1	140.82	-189.9	-54.4	291.8	282.4	9.46	30.836		
1,800.0	1,765.1	1,789.6	1,768.1	6.4	5.4	140.34	-207.8	-50.8	310.5	300.4	10.18	30.515		
1,900.0	1,861.9	1,887.8	1,864.6	6.9	5.8	139.90	-225.7	-47.2	329.3	318.4	10.89	30.232		
2,000.0	1,958.6	1,986.0	1,961.1	7.4	6.1	139.52	-243.6	-43.6	348.0	336.4	11.61	29.980		
2,100.0	2,055.4	2,084.2	2,057.6	7.9	6.5	139.17	-261.5	-40.0	366.8	354.4	12.33	29.755		
2,200.0	2,152.1	2,182.4	2,154.1	8.3	6.9	138.86	-279.4	-36.4	385.5	372.5	13.05	29.553		
2,300.0	2,248.9	2,280.6	2,250.6	8.8	7.2	138.57	-297.3	-32.8	404.3	390.5	13.77	29.371		
2,400.0	2,345.7	2,378.8	2,347.1	9.3	7.6	138.31	-315.2	-29.2	423.1	408.6	14.49	29.206		
2,500.0	2,442.4	2,477.0	2,443.6	9.8	7.9	138.08	-333.1	-25.5	441.9	426.7	15.21	29.055		
2,600.0	2,539.2	2,575.2	2,540.0	10.3	8.3	137.86	-350.9	-21.9	460.7	444.8	15.93	28.917		
2,700.0	2,636.0	2,673.4	2,636.5	10.7	8.7	137.66	-368.8	-18.3	479.5	462.8	16.65	28.790		
2,800.0	2,732.7	2,771.6	2,733.0	11.2	9.0	137.47	-386.7	-14.7	498.3	480.9	17.38	28.674		
2,900.0	2,829.5	2,869.8	2,829.5	11.7	9.4	137.30	-404.6	-11.1	517.1	499.0	18.10	28.566		
3,000.0	2,926.2	2,968.0	2,926.0	12.2	9.7	137.14	-422.5	-7.5	535.9	517.1	18.83	28.466		
3,100.0	3,023.0	3,066.2	3,022.5	12.7	10.1	136.99	-440.4	-3.9	554.8	535.2	19.55	28.373		
3,200.0	3,119.8	3,164.4	3,119.0	13.2	10.5	136.85	-458.3	-0.3	573.6	553.3	20.28	28.287		
3,300.0	3,216.5	3,262.6	3,215.5	13.6	10.8	136.72	-476.2	3.3	592.4	571.4	21.00	28.206		
3,400.0	3,313.3	3,360.8	3,312.0	14.1	11.2	136.60	-494.1	7.0	611.3	589.5	21.73	28.131		
3,500.0	3,410.1	3,459.0	3,408.5	14.6	11.6	136.49	-512.0	10.6	630.1	607.6	22.46	28.060		
3,600.0	3,506.8	3,557.2	3,505.0	15.1	11.9	136.38	-529.9	14.2	648.9	625.8	23.18	27.993		
3,700.0	3,603.6	3,655.4	3,601.4	15.6	12.3	136.28	-547.7	17.8	667.8	643.9	23.91	27.931		
3,800.0	3,700.3	3,753.6	3,697.9	16.0	12.6	136.18	-565.6	21.4	686.6	662.0	24.64	27.872		
3,900.0	3,797.1	3,851.8	3,794.4	16.5	13.0	136.09	-583.5	25.0	705.5	680.1	25.36	27.816		
4,000.0	3,893.9	3,950.0	3,890.9	17.0	13.4	136.00	-601.4	28.6	724.3	698.2	26.09	27.763		
4,100.0	3,990.6	4,048.2	3,987.4	17.5	13.7	135.92	-619.3	32.2	743.2	716.3	26.82	27.713		
4,200.0	4,087.4	4,146.5	4,083.9	18.0	14.1	135.84	-637.2	35.8	762.0	734.5	27.54	27.666		
4,300.0	4,184.2	4,244.7	4,180.4	18.5	14.4	135.77	-655.1	39.5	780.9	752.6	28.27	27.621		
4,400.0	4,280.9	4,342.9	4,276.9	18.9	14.8	135.69	-673.0	43.1	799.7	770.7	29.00	27.578		
4,500.0	4,377.7	4,441.1	4,373.4	19.4	15.2	135.63	-690.9	46.7	818.6	788.8	29.73	27.537		
4,600.0	4,474.4	4,539.3	4,469.9	19.9	15.5	135.56	-708.8	50.3	837.4	807.0	30.45	27.498		
4,700.0	4,571.2	4,637.5	4,566.4	20.4	15.9	135.50	-726.7	53.9	856.3	825.1	31.18	27.461		
4,800.0	4,668.0	4,735.7	4,662.9	20.9	16.3	135.44	-744.5	57.5	875.1	843.2	31.91	27.425		
4,900.0	4,764.7	4,833.9	4,759.3	21.4	16.6	135.38	-762.4	61.1	894.0	861.3	32.64	27.391		
5,000.0	4,861.5	4,932.1	4,855.8	21.8	17.0	135.33	-780.3	64.7	912.8	879.5	33.37	27.359		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR05D D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	4,958.3	5,030.3	4,952.3	22.3	17.3	135.28	-798.2	68.4	931.7	897.6	34.09	27.328		
5,200.0	5,055.0	5,128.5	5,048.8	22.8	17.7	135.23	-816.1	72.0	950.6	915.7	34.82	27.298		
5,300.0	5,151.8	5,226.7	5,145.3	23.3	18.1	135.18	-834.0	75.6	969.4	933.9	35.55	27.269		
5,400.0	5,248.5	5,324.9	5,241.8	23.8	18.4	135.13	-851.9	79.2	988.3	952.0	36.28	27.242		
5,500.0	5,345.3	5,423.1	5,338.3	24.3	18.8	135.09	-869.8	82.8	1,007.1	970.1	37.01	27.215		
5,600.0	5,442.1	5,521.3	5,434.8	24.7	19.1	135.05	-887.7	86.4	1,026.0	988.3	37.73	27.190		
5,700.0	5,538.8	5,619.5	5,531.3	25.2	19.5	135.01	-905.6	90.0	1,044.9	1,006.4	38.46	27.165		
5,800.0	5,635.6	5,717.7	5,627.8	25.7	19.9	134.97	-923.5	93.6	1,063.7	1,024.5	39.19	27.142		
5,900.0	5,732.4	5,815.9	5,724.3	26.2	20.2	134.93	-941.3	97.2	1,082.6	1,042.7	39.92	27.119		
6,000.0	5,829.1	5,914.1	5,820.7	26.7	20.6	134.89	-959.2	100.9	1,101.5	1,060.8	40.65	27.097		
6,100.0	5,925.9	6,012.3	5,917.2	27.2	21.0	134.85	-977.1	104.5	1,120.3	1,078.9	41.38	27.076		
6,200.0	6,022.7	6,110.5	6,013.7	27.6	21.3	134.82	-995.0	108.1	1,139.2	1,097.1	42.11	27.055		
6,300.0	6,119.4	6,208.7	6,110.2	28.1	21.7	134.79	-1,012.9	111.7	1,158.0	1,115.2	42.83	27.035		
6,400.0	6,216.2	6,306.9	6,206.7	28.6	22.0	134.75	-1,030.8	115.3	1,176.9	1,133.3	43.56	27.016		
6,500.0	6,312.9	6,405.1	6,303.2	29.1	22.4	134.72	-1,048.7	118.9	1,195.8	1,151.5	44.29	26.998		
6,600.0	6,409.7	6,503.3	6,399.7	29.6	22.8	134.69	-1,066.6	122.5	1,214.6	1,169.6	45.02	26.980		
6,700.0	6,506.5	6,601.5	6,496.2	30.1	23.1	134.66	-1,084.5	126.1	1,233.5	1,187.8	45.75	26.962		
6,800.0	6,603.2	6,699.7	6,592.7	30.5	23.5	134.63	-1,102.4	129.7	1,252.4	1,205.9	46.48	26.945		
6,900.0	6,700.0	6,797.9	6,689.2	31.0	23.9	134.61	-1,120.3	133.4	1,271.2	1,224.0	47.21	26.929		
7,000.0	6,796.8	6,896.1	6,785.7	31.5	24.2	134.58	-1,138.2	137.0	1,290.1	1,242.2	47.94	26.913		
7,100.0	6,893.5	6,994.3	6,882.2	32.0	24.6	134.55	-1,156.0	140.6	1,309.0	1,260.3	48.66	26.898		
7,200.0	6,990.3	7,092.5	6,978.6	32.5	24.9	134.53	-1,173.9	144.2	1,327.8	1,278.4	49.39	26.883		
7,300.0	7,087.0	7,190.7	7,075.1	33.0	25.3	134.50	-1,191.8	147.8	1,346.7	1,296.6	50.12	26.868		
7,400.0	7,183.8	7,288.9	7,171.6	33.4	25.7	134.48	-1,209.7	151.4	1,365.6	1,314.7	50.85	26.854		
7,500.0	7,280.6	7,387.1	7,268.1	33.9	26.0	134.45	-1,227.6	155.0	1,384.4	1,332.9	51.58	26.841 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR06B D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-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	108.24	-4.7	14.4	15.1					
100.0	100.0	100.0	100.0	0.1	0.1	108.24	-4.7	14.4	15.1	14.8	0.30	50.994		
200.0	200.0	200.0	200.0	0.3	0.3	108.24	-4.7	14.4	15.1	14.5	0.65	23.430		
300.0	300.0	300.0	300.0	0.5	0.5	-67.91	-4.7	14.4	14.4	13.4	1.00	14.417		
400.0	399.9	399.9	399.9	0.7	0.7	-57.46	-4.7	14.4	11.9	10.6	1.36	8.765		
500.0	499.6	499.6	499.6	0.9	0.8	-87.81	-4.7	14.4	9.3	7.6	1.75	5.319		
503.9	503.5	503.5	503.5	0.9	0.9	-89.81	-4.7	14.4	9.3	7.5	1.77	5.267 CC, ES, SF		
600.0	598.9	599.2	599.2	1.2	1.0	-129.35	-5.5	15.9	12.9	10.8	2.10	6.138		
700.0	697.9	699.1	699.0	1.5	1.2	-146.10	-7.8	20.6	20.4	18.0	2.44	8.370		
800.0	796.3	799.4	798.8	1.8	1.4	-153.10	-11.7	28.4	28.9	26.1	2.80	10.352		
900.0	894.0	900.0	898.7	2.2	1.7	-156.77	-12.2	39.3	37.7	34.6	3.16	11.936		
1,000.0	991.0	1,000.9	998.3	2.6	2.0	-159.25	-24.2	53.5	46.4	42.9	3.54	13.137		
1,100.0	1,087.8	1,101.4	1,097.1	3.1	2.3	-160.59	-32.6	70.2	53.3	49.3	3.93	13.543		
1,200.0	1,184.5	1,201.2	1,195.0	3.6	2.6	-161.48	-41.0	87.2	59.8	55.4	4.33	13.793		
1,300.0	1,281.3	1,300.9	1,293.0	4.0	3.0	-162.19	-49.5	104.2	66.3	61.5	4.73	14.005		
1,400.0	1,378.0	1,400.7	1,391.0	4.5	3.3	-162.78	-58.0	121.1	72.8	67.7	5.13	14.187		
1,500.0	1,474.8	1,500.5	1,488.9	5.0	3.7	-163.27	-66.4	138.1	79.3	73.8	5.53	14.346		
1,600.0	1,571.6	1,600.3	1,586.9	5.5	4.0	-163.69	-74.9	155.1	85.8	79.9	5.93	14.486		
1,700.0	1,668.3	1,700.1	1,684.9	5.9	4.4	-164.04	-83.4	172.0	92.4	86.1	6.32	14.610		
1,800.0	1,765.1	1,799.9	1,782.8	6.4	4.8	-164.36	-91.8	189.0	98.9	92.2	6.72	14.722		
1,900.0	1,861.9	1,899.7	1,880.8	6.9	5.1	-164.63	-100.3	206.0	105.5	98.3	7.11	14.821		
2,000.0	1,958.6	1,999.4	1,978.8	7.4	5.5	-164.87	-108.8	223.0	112.0	104.5	7.51	14.912		
2,100.0	2,055.4	2,099.2	2,076.7	7.9	5.9	-165.08	-117.2	239.9	118.5	110.6	7.91	14.994		
2,200.0	2,152.1	2,199.0	2,174.7	8.3	6.2	-165.27	-125.7	256.9	125.1	116.8	8.30	15.069		
2,300.0	2,248.9	2,298.8	2,272.7	8.8	6.6	-165.44	-134.2	273.9	131.6	122.9	8.69	15.138		
2,400.0	2,345.7	2,398.6	2,370.6	9.3	7.0	-165.60	-142.6	290.8	138.2	129.1	9.09	15.201		
2,500.0	2,442.4	2,498.4	2,468.6	9.8	7.4	-165.74	-151.1	307.8	144.7	135.2	9.48	15.260		
2,600.0	2,539.2	2,598.1	2,566.6	10.3	7.7	-165.87	-159.5	324.8	151.3	141.4	9.88	15.314		
2,700.0	2,636.0	2,697.9	2,664.5	10.7	8.1	-165.99	-168.0	341.8	157.8	147.5	10.27	15.365		
2,800.0	2,732.7	2,797.7	2,762.5	11.2	8.5	-166.10	-176.5	358.7	164.4	153.7	10.66	15.411		
2,900.0	2,829.5	2,897.5	2,860.5	11.7	8.9	-166.20	-184.9	375.7	170.9	159.8	11.06	15.455		
3,000.0	2,926.2	2,997.3	2,958.4	12.2	9.2	-166.29	-193.4	392.7	177.5	166.0	11.45	15.496		
3,100.0	3,023.0	3,097.1	3,056.4	12.7	9.6	-166.38	-201.9	409.7	184.0	172.2	11.84	15.535		
3,200.0	3,119.8	3,196.9	3,154.3	13.2	10.0	-166.46	-210.3	426.6	190.6	178.3	12.24	15.571		
3,300.0	3,216.5	3,296.6	3,252.3	13.6	10.4	-166.54	-218.8	443.6	197.1	184.5	12.63	15.605		
3,400.0	3,313.3	3,396.4	3,350.3	14.1	10.7	-166.61	-227.3	460.6	203.7	190.6	13.02	15.637		
3,500.0	3,410.1	3,496.2	3,448.2	14.6	11.1	-166.67	-235.7	477.5	210.2	196.8	13.42	15.667		
3,600.0	3,506.8	3,596.0	3,546.2	15.1	11.5	-166.73	-244.2	494.5	216.8	202.9	13.81	15.696		
3,700.0	3,603.6	3,695.8	3,644.2	15.6	11.9	-166.79	-252.7	511.5	223.3	209.1	14.20	15.723		
3,800.0	3,700.3	3,795.6	3,742.1	16.0	12.3	-166.85	-261.1	528.5	229.9	215.3	14.60	15.749		
3,900.0	3,797.1	3,895.3	3,840.1	16.5	12.6	-166.90	-269.6	545.4	236.4	221.4	14.99	15.773		
4,000.0	3,893.9	3,995.1	3,938.1	17.0	13.0	-166.95	-278.0	562.4	243.0	227.6	15.38	15.796		
4,100.0	3,990.6	4,094.9	4,036.0	17.5	13.4	-167.00	-286.5	579.4	249.5	233.7	15.77	15.819		
4,200.0	4,087.4	4,194.7	4,134.0	18.0	13.8	-167.04	-295.0	596.3	256.1	239.9	16.17	15.840		
4,300.0	4,184.2	4,294.5	4,232.0	18.5	14.1	-167.08	-303.4	613.3	262.6	246.1	16.56	15.860		
4,400.0	4,280.9	4,394.3	4,329.9	18.9	14.5	-167.12	-311.9	630.3	269.2	252.2	16.95	15.879		
4,500.0	4,377.7	4,494.1	4,427.9	19.4	14.9	-167.16	-320.4	647.3	275.7	258.4	17.34	15.898		
4,600.0	4,474.4	4,593.8	4,525.9	19.9	15.3	-167.20	-328.8	664.2	282.3	264.5	17.74	15.915		
4,700.0	4,571.2	4,693.6	4,623.8	20.4	15.6	-167.23	-337.3	681.2	288.8	270.7	18.13	15.932		
4,800.0	4,668.0	4,793.4	4,721.8	20.9	16.0	-167.27	-345.8	698.2	295.4	276.9	18.52	15.949		
4,900.0	4,764.7	4,893.2	4,819.8	21.4	16.4	-167.30	-354.2	715.2	301.9	283.0	18.91	15.964		
5,000.0	4,861.5	4,993.0	4,917.7	21.8	16.8	-167.33	-362.7	732.1	308.5	289.2	19.31	15.979		

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 LR06D D21 595
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Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR06B D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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)				
5,100.0	4,958.3	5,092.8	5,015.7	22.3	17.2	-167.36	-371.2	749.1	315.0	295.3	19.70	15.994		
5,200.0	5,055.0	5,192.6	5,113.7	22.8	17.5	-167.39	-379.6	766.1	321.6	301.5	20.09	16.008		
5,300.0	5,151.8	5,292.3	5,211.6	23.3	17.9	-167.41	-388.1	783.0	328.2	307.7	20.48	16.021		
5,400.0	5,248.5	5,392.1	5,309.6	23.8	18.3	-167.44	-396.6	800.0	334.7	313.8	20.87	16.034		
5,500.0	5,345.3	5,491.9	5,407.6	24.3	18.7	-167.46	-405.0	817.0	341.3	320.0	21.27	16.046		
5,600.0	5,442.1	5,591.7	5,505.5	24.7	19.0	-167.49	-413.5	834.0	347.8	326.2	21.66	16.058		
5,700.0	5,538.8	5,691.5	5,603.5	25.2	19.4	-167.51	-421.9	850.9	354.4	332.3	22.05	16.070		
5,800.0	5,635.6	5,791.3	5,701.5	25.7	19.8	-167.53	-430.4	867.9	360.9	338.5	22.44	16.081		
5,900.0	5,732.4	5,891.0	5,799.4	26.2	20.2	-167.55	-438.9	884.9	367.5	344.6	22.84	16.092		
6,000.0	5,829.1	5,990.8	5,897.4	26.7	20.6	-167.57	-447.3	901.8	374.0	350.8	23.23	16.102		
6,100.0	5,925.9	6,090.6	5,995.4	27.2	20.9	-167.59	-455.8	918.8	380.6	357.0	23.62	16.113		
6,200.0	6,022.7	6,190.4	6,093.3	27.6	21.3	-167.61	-464.3	935.8	387.1	363.1	24.01	16.122		
6,300.0	6,119.4	6,290.2	6,191.3	28.1	21.7	-167.63	-472.7	952.8	393.7	369.3	24.40	16.132		
6,400.0	6,216.2	6,390.0	6,289.3	28.6	22.1	-167.65	-481.2	969.7	400.2	375.4	24.80	16.141		
6,500.0	6,312.9	6,489.8	6,387.2	29.1	22.4	-167.67	-489.7	986.7	406.8	381.6	25.19	16.150		
6,600.0	6,409.7	6,589.5	6,485.2	29.6	22.8	-167.68	-498.1	1,003.7	413.4	387.8	25.58	16.159		
6,700.0	6,506.5	6,689.3	6,583.2	30.1	23.2	-167.70	-506.6	1,020.7	419.9	393.9	25.97	16.167		
6,800.0	6,603.2	6,789.1	6,681.1	30.5	23.6	-167.72	-515.1	1,037.6	426.5	400.1	26.37	16.175		
6,900.0	6,700.0	6,888.9	6,779.1	31.0	24.0	-167.73	-523.5	1,054.6	433.0	406.3	26.76	16.183		
7,000.0	6,796.8	6,988.7	6,877.1	31.5	24.3	-167.75	-532.0	1,071.6	439.6	412.4	27.15	16.191		
7,100.0	6,893.5	7,088.5	6,975.0	32.0	24.7	-167.76	-540.4	1,088.5	446.1	418.6	27.54	16.198		
7,200.0	6,990.3	7,188.3	7,073.0	32.5	25.1	-167.77	-548.9	1,105.5	452.7	424.7	27.93	16.206		
7,300.0	7,087.0	7,288.0	7,171.0	33.0	25.5	-167.79	-557.4	1,122.5	459.2	430.9	28.33	16.213		
7,400.0	7,183.8	7,387.8	7,268.9	33.4	25.8	-167.80	-565.8	1,139.5	465.8	437.1	28.72	16.220		
7,500.0	7,280.6	7,487.6	7,366.9	33.9	26.2	-167.81	-574.3	1,156.4	472.3	443.2	29.11	16.226		
7,600.0	7,377.3	7,587.4	7,464.8	34.4	26.6	-167.83	-582.8	1,173.4	478.9	449.4	29.50	16.233		
7,700.0	7,474.1	7,687.2	7,562.8	34.9	27.0	-167.84	-591.2	1,190.4	485.5	455.6	29.89	16.239		
7,800.0	7,570.9	7,787.0	7,660.8	35.4	27.4	-167.85	-599.7	1,207.3	492.0	461.7	30.29	16.246		
7,900.0	7,667.6	7,886.7	7,758.7	35.9	27.7	-167.86	-608.2	1,224.3	498.6	467.9	30.68	16.252		
8,000.0	7,764.4	7,986.5	7,856.7	36.3	28.1	-167.87	-616.6	1,241.3	505.1	474.0	31.07	16.258		
8,100.0	7,861.1	8,086.3	7,954.7	36.8	28.5	-167.88	-625.1	1,258.3	511.7	480.2	31.46	16.263		
8,200.0	7,957.9	8,186.1	8,052.6	37.3	28.9	-167.90	-633.6	1,275.2	518.2	486.4	31.85	16.269		
8,300.0	8,054.7	8,285.9	8,150.6	37.8	29.2	-167.91	-642.0	1,292.2	524.8	492.5	32.25	16.274		
8,400.0	8,151.5	8,385.7	8,248.6	38.3	29.6	-167.92	-650.5	1,309.2	531.1	498.5	32.65	16.269		
8,500.0	8,248.9	8,473.2	8,334.6	38.7	29.9	-167.92	-657.5	1,323.3	535.7	502.7	33.03	16.222		
8,600.0	8,347.1	8,557.8	8,418.3	39.0	30.2	-167.92	-663.3	1,334.8	539.8	506.4	33.36	16.178		
8,700.0	8,445.9	8,642.4	8,502.2	39.3	30.4	-167.92	-667.9	1,344.1	543.2	509.5	33.67	16.134		
8,800.0	8,545.2	8,726.9	8,586.3	39.5	30.5	-167.93	-671.4	1,351.1	546.0	512.1	33.94	16.090		
8,900.0	8,644.8	8,811.3	8,670.6	39.7	30.7	-167.94	-673.8	1,355.9	548.3	514.1	34.17	16.047		
9,000.0	8,744.7	8,900.0	8,759.2	39.8	30.8	-167.96	-675.1	1,358.6	550.0	515.7	34.38	16.001		
9,100.0	8,844.6	8,985.2	8,844.4	39.9	30.9	72.39	-675.3	1,359.0	551.0	516.4	34.55	15.948		
9,200.0	8,944.6	9,084.4	8,943.7	40.0	30.9	72.37	-675.5	1,358.7	551.0	516.2	34.85	15.812		
9,300.0	9,044.6	9,183.7	9,042.9	40.0	31.0	72.36	-675.9	1,358.0	551.1	515.9	35.14	15.680		
9,400.0	9,144.6	9,283.1	9,142.3	40.1	31.1	72.35	-676.5	1,356.9	551.1	515.7	35.44	15.552		
9,500.0	9,244.6	9,383.1	9,242.3	40.2	31.2	72.35	-677.2	1,355.7	551.1	515.4	35.74	15.421		
9,600.0	9,344.6	9,483.1	9,342.3	40.2	31.3	72.35	-677.9	1,354.6	551.1	515.1	36.04	15.291		
9,700.0	9,444.6	9,583.1	9,442.3	40.3	31.3	72.35	-678.6	1,353.4	551.1	514.8	36.34	15.163		
9,800.0	9,544.6	9,683.1	9,542.3	40.3	31.4	72.35	-679.3	1,352.2	551.1	514.5	36.65	15.037		
9,900.0	9,644.6	9,783.1	9,642.3	40.4	31.5	72.35	-680.0	1,351.0	551.1	514.1	36.96	14.913		
10,000.0	9,744.6	9,883.1	9,742.3	40.5	31.6	72.35	-680.7	1,349.8	551.1	513.8	37.26	14.790		
10,100.0	9,844.6	9,983.1	9,842.3	40.5	31.7	72.35	-681.4	1,348.6	551.1	513.5	37.57	14.669		
10,200.0	9,944.6	10,083.1	9,942.2	40.6	31.8	72.35	-682.1	1,347.4	551.1	513.2	37.88	14.549		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR06B D21 595 - 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		
10,300.0	10,044.5	10,183.1	10,042.2	40.7	31.8	72.35	-682.7	1,346.2	551.1	512.9	38.19	14.432		
10,400.0	10,144.5	10,283.1	10,142.2	40.7	31.9	72.35	-683.4	1,345.0	551.1	512.6	38.50	14.315		
10,500.0	10,244.5	10,383.1	10,242.2	40.8	32.0	72.35	-684.1	1,343.8	551.1	512.3	38.81	14.201		
10,600.0	10,344.5	10,483.1	10,342.2	40.9	32.1	72.35	-684.8	1,342.6	551.1	512.0	39.12	14.088		
10,700.0	10,444.5	10,583.1	10,442.2	40.9	32.2	72.35	-685.5	1,341.4	551.1	511.7	39.43	13.976		
10,800.0	10,544.5	10,683.1	10,542.2	41.0	32.3	72.35	-686.2	1,340.2	551.1	511.4	39.74	13.866		
10,900.0	10,644.5	10,783.1	10,642.2	41.1	32.4	72.35	-686.9	1,339.0	551.1	511.1	40.06	13.758		
11,000.0	10,744.5	10,883.1	10,742.2	41.2	32.5	72.35	-687.6	1,337.8	551.1	510.7	40.37	13.651		
11,100.0	10,844.5	10,983.1	10,842.2	41.2	32.6	72.35	-688.3	1,336.6	551.1	510.4	40.69	13.546		
11,200.0	10,944.5	11,083.1	10,942.1	41.3	32.7	72.35	-689.0	1,335.4	551.1	510.1	41.00	13.441		
11,300.0	11,044.5	11,183.1	11,042.1	41.4	32.7	72.35	-689.7	1,334.2	551.1	509.8	41.32	13.339		
11,400.0	11,144.4	11,283.1	11,142.1	41.4	32.8	72.35	-690.3	1,333.0	551.1	509.5	41.63	13.237		
11,500.0	11,244.4	11,383.1	11,242.1	41.5	32.9	72.35	-691.0	1,331.8	551.1	509.2	41.95	13.137		
11,600.0	11,344.4	11,483.1	11,342.1	41.6	33.0	72.35	-691.7	1,330.6	551.1	508.8	42.27	13.039		
11,700.0	11,444.4	11,583.1	11,442.1	41.7	33.1	72.35	-692.4	1,329.4	551.1	508.5	42.59	12.941		
11,800.0	11,544.4	11,683.1	11,542.1	41.7	33.2	72.35	-693.1	1,328.2	551.1	508.2	42.90	12.845		
11,900.0	11,644.4	11,783.1	11,642.1	41.8	33.3	72.35	-693.8	1,327.0	551.1	507.9	43.22	12.751		
12,000.0	11,744.4	11,883.1	11,742.1	41.9	33.4	72.35	-694.5	1,325.8	551.1	507.6	43.54	12.657		
12,100.0	11,844.4	11,983.1	11,842.1	42.0	33.5	72.35	-695.2	1,324.6	551.1	507.3	43.86	12.565		
12,102.8	11,847.2	11,985.9	11,844.8	42.0	33.5	72.35	-695.2	1,324.5	551.1	507.2	43.87	12.562		
12,146.6	11,891.0	12,002.0	11,861.0	42.0	33.5	72.35	-695.3	1,324.3	551.8	507.8	43.97	12.550		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR06C D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-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	-71.59	9.5	-28.5	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	-71.59	9.5	-28.5	30.0	29.7	101.087			
200.0	200.0	200.0	200.0	0.3	0.3	-71.59	9.5	-28.5	30.0	29.3	0.65	46.445 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	121.24	9.5	-28.5	30.9	29.9	1.00	30.941		
400.0	399.9	399.9	399.9	0.7	0.7	154.33	9.5	-28.5	34.6	33.2	1.35	25.607		
500.0	499.6	499.6	499.6	0.9	0.8	167.93	9.5	-28.5	41.9	40.2	1.70	24.702		
600.0	598.9	598.9	598.9	1.2	1.0	174.72	9.5	-28.5	52.9	50.8	2.04	25.900		
700.0	697.9	697.9	697.9	1.5	1.2	178.35	9.5	-28.5	67.2	64.9	2.38	28.251		
800.0	796.3	796.3	796.3	1.8	1.4	-179.65	9.5	-28.5	85.0	82.3	2.72	31.314		
900.0	894.0	894.0	894.0	2.2	1.5	-178.53	9.5	-28.5	106.2	103.2	3.05	34.862		
1,000.0	991.0	991.0	991.0	2.6	1.7	-178.16	9.5	-28.5	130.6	127.2	3.38	38.662		
1,100.0	1,087.8	1,092.7	1,092.7	3.1	1.9	-178.57	8.5	-27.3	154.4	150.7	3.73	41.417		
1,200.0	1,184.5	1,196.5	1,196.3	3.6	2.1	-179.09	5.0	-23.4	174.8	170.8	4.08	42.803		
1,300.0	1,281.3	1,301.6	1,301.1	4.0	2.3	-179.71	-1.1	-16.6	191.7	187.3	4.45	43.128		
1,400.0	1,378.0	1,407.9	1,406.5	4.5	2.5	179.54	-9.8	-6.8	205.1	200.3	4.81	42.609		
1,500.0	1,474.8	1,515.1	1,512.3	5.0	2.8	178.66	-21.3	6.0	214.8	209.6	5.19	41.407		
1,600.0	1,571.6	1,622.8	1,617.9	5.5	3.1	177.61	-35.4	21.9	221.0	215.4	5.57	39.639		
1,700.0	1,668.3	1,730.8	1,722.9	5.9	3.5	176.37	-52.2	40.8	223.5	217.6	5.98	37.391		
1,800.0	1,765.1	1,838.8	1,826.8	6.4	4.0	174.87	-71.6	62.6	222.6	216.2	6.41	34.731		
1,900.0	1,861.9	1,941.1	1,924.5	6.9	4.5	173.21	-91.9	85.3	219.0	212.1	6.86	31.910		
2,000.0	1,958.6	2,040.8	2,019.6	7.4	5.0	171.51	-111.8	107.7	215.4	208.1	7.35	29.325		
2,100.0	2,055.4	2,140.5	2,114.8	7.9	5.5	169.77	-131.8	130.0	212.0	204.2	7.87	26.941		
2,200.0	2,152.1	2,240.3	2,209.9	8.3	6.0	167.96	-151.7	152.4	208.9	200.4	8.44	24.739		
2,300.0	2,248.9	2,340.0	2,305.0	8.8	6.5	166.11	-171.6	174.7	205.9	196.8	9.07	22.709		
2,400.0	2,345.7	2,439.7	2,400.2	9.3	7.0	164.20	-191.5	197.0	203.1	193.4	9.75	20.840		
2,500.0	2,442.4	2,539.4	2,495.3	9.8	7.6	162.24	-211.4	219.4	200.6	190.1	10.49	19.127		
2,600.0	2,539.2	2,639.2	2,590.4	10.3	8.1	160.24	-231.3	241.7	198.4	187.1	11.29	17.563		
2,700.0	2,636.0	2,738.9	2,685.6	10.7	8.7	158.19	-251.2	264.1	196.3	184.2	12.16	16.142		
2,800.0	2,732.7	2,838.6	2,780.7	11.2	9.2	156.10	-271.1	286.4	194.6	181.5	13.10	14.857		
2,900.0	2,829.5	2,938.4	2,875.8	11.7	9.7	153.98	-291.0	308.7	193.1	179.0	14.09	13.699		
3,000.0	2,926.2	3,038.1	2,971.0	12.2	10.3	151.82	-310.9	331.1	191.9	176.7	15.15	12.661		
3,100.0	3,023.0	3,137.8	3,066.1	12.7	10.8	149.65	-330.8	353.4	190.9	174.6	16.27	11.733		
3,200.0	3,119.8	3,237.5	3,161.2	13.2	11.4	147.45	-350.8	375.8	190.2	172.8	17.44	10.906		
3,300.0	3,216.5	3,337.3	3,256.4	13.6	11.9	145.24	-370.7	398.1	189.8	171.2	18.67	10.171		
3,387.0	3,300.7	3,424.0	3,339.1	14.1	12.4	143.32	-388.0	417.5	189.7	170.0	19.76	9.600		
3,400.0	3,313.3	3,437.0	3,351.5	14.1	12.5	143.03	-390.6	420.4	189.7	169.8	19.93	9.520		
3,500.0	3,410.1	3,536.7	3,446.6	14.6	13.1	140.82	-410.5	442.8	189.9	168.7	21.24	8.943		
3,600.0	3,506.8	3,636.5	3,541.8	15.1	13.6	138.61	-430.4	465.1	190.4	167.8	22.57	8.434		
3,700.0	3,603.6	3,736.2	3,636.9	15.6	14.2	136.42	-450.3	487.5	191.1	167.2	23.94	7.985		
3,800.0	3,700.3	3,835.9	3,732.0	16.0	14.7	134.25	-470.2	509.8	192.2	166.8	25.32	7.589		
3,900.0	3,797.1	3,935.7	3,827.2	16.5	15.3	132.10	-490.1	532.2	193.5	166.7	26.72	7.240		
4,000.0	3,893.9	4,035.4	3,922.3	17.0	15.8	129.99	-510.0	554.5	195.0	166.9	28.13	6.934		
4,100.0	3,990.6	4,135.1	4,017.4	17.5	16.4	127.91	-529.9	576.8	196.8	167.3	29.54	6.665		
4,200.0	4,087.4	4,234.8	4,112.6	18.0	16.9	125.87	-549.9	599.2	198.9	168.0	30.94	6.429		
4,300.0	4,184.2	4,334.6	4,207.7	18.5	17.5	123.88	-569.8	621.5	201.3	168.9	32.35	6.222		
4,400.0	4,280.9	4,434.3	4,302.8	18.9	18.1	121.93	-589.7	643.9	203.8	170.1	33.74	6.042		
4,500.0	4,377.7	4,534.0	4,398.0	19.4	18.6	120.04	-609.6	666.2	206.6	171.5	35.12	5.884		
4,600.0	4,474.4	4,633.8	4,493.1	19.9	19.2	118.20	-629.5	688.5	209.7	173.2	36.48	5.747		
4,700.0	4,571.2	4,733.5	4,588.2	20.4	19.7	116.41	-649.4	710.9	212.9	175.1	37.83	5.628		
4,800.0	4,668.0	4,833.2	4,683.4	20.9	20.3	114.67	-669.3	733.2	216.3	177.2	39.15	5.525		
4,900.0	4,764.7	4,932.9	4,778.5	21.4	20.9	113.00	-689.2	755.6	220.0	179.5	40.46	5.436		
5,000.0	4,861.5	5,032.7	4,873.6	21.8	21.4	111.37	-709.1	777.9	223.8	182.0	41.74	5.360		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR06C D21 595 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,100.0	4,958.3	5,132.4	4,968.8	22.3	22.0	109.81	-729.0	800.3	227.8	184.7	43.01	5.296		
5,200.0	5,055.0	5,232.1	5,063.9	22.8	22.5	108.29	-748.9	822.6	231.9	187.7	44.25	5.241		
5,300.0	5,151.8	5,331.9	5,159.0	23.3	23.1	106.84	-768.9	844.9	236.2	190.7	45.47	5.195		
5,400.0	5,248.5	5,431.6	5,254.2	23.8	23.7	105.43	-788.8	867.3	240.7	194.0	46.66	5.157		
5,500.0	5,345.3	5,531.3	5,349.3	24.3	24.2	104.08	-808.7	889.6	245.2	197.4	47.84	5.126		
5,600.0	5,442.1	5,631.1	5,444.4	24.7	24.8	102.77	-828.6	912.0	250.0	201.0	49.00	5.102		
5,700.0	5,538.8	5,730.8	5,539.6	25.2	25.3	101.52	-848.5	934.3	254.8	204.7	50.13	5.083		
5,800.0	5,635.6	5,830.5	5,634.7	25.7	25.9	100.31	-868.4	956.6	259.8	208.5	51.25	5.069		
5,900.0	5,732.4	5,930.2	5,729.8	26.2	26.5	99.15	-888.3	979.0	264.9	212.5	52.35	5.060		
6,000.0	5,829.1	6,030.0	5,825.0	26.7	27.0	98.03	-908.2	1,001.3	270.0	216.6	53.43	5.054		
6,100.0	5,925.9	6,129.7	5,920.1	27.2	27.6	96.96	-928.1	1,023.7	275.3	220.8	54.50	5.052 SF		
6,200.0	6,022.7	6,229.4	6,015.2	27.6	28.1	95.92	-948.0	1,046.0	280.7	225.2	55.55	5.054		
6,300.0	6,119.4	6,329.2	6,110.4	28.1	28.7	94.93	-967.9	1,068.3	286.2	229.6	56.58	5.058		
6,400.0	6,216.2	6,428.9	6,205.5	28.6	29.3	93.97	-987.9	1,090.7	291.7	234.1	57.60	5.064		
6,500.0	6,312.9	6,528.6	6,300.6	29.1	29.8	93.04	-1,007.8	1,113.0	297.3	238.7	58.61	5.073		
6,600.0	6,409.7	6,628.3	6,395.8	29.6	30.4	92.16	-1,027.7	1,135.4	303.0	243.4	59.60	5.084		
6,700.0	6,506.5	6,728.1	6,490.9	30.1	30.9	91.30	-1,047.6	1,157.7	308.8	248.2	60.59	5.097		
6,800.0	6,603.2	6,827.8	6,586.0	30.5	31.5	90.48	-1,067.5	1,180.1	314.6	253.1	61.56	5.111		
6,900.0	6,700.0	6,927.5	6,681.2	31.0	32.1	89.69	-1,087.4	1,202.4	320.5	258.0	62.52	5.127		
7,000.0	6,796.8	7,027.3	6,776.3	31.5	32.6	88.92	-1,107.3	1,224.7	326.5	263.0	63.47	5.144		
7,100.0	6,893.5	7,127.0	6,871.4	32.0	33.2	88.18	-1,127.2	1,247.1	332.5	268.1	64.42	5.162		
7,200.0	6,990.3	7,226.7	6,966.6	32.5	33.8	87.47	-1,147.1	1,269.4	338.6	273.2	65.35	5.181		
7,300.0	7,087.0	7,326.4	7,061.7	33.0	34.3	86.79	-1,167.0	1,291.8	344.7	278.4	66.28	5.201		
7,400.0	7,183.8	7,426.2	7,156.8	33.4	34.9	86.13	-1,187.0	1,314.1	350.8	283.6	67.20	5.221		
7,500.0	7,280.6	7,525.9	7,252.0	33.9	35.4	85.49	-1,206.9	1,336.4	357.1	288.9	68.11	5.242		
7,600.0	7,377.3	7,625.6	7,347.1	34.4	36.0	84.87	-1,226.8	1,358.8	363.3	294.3	69.02	5.264		
7,700.0	7,474.1	7,725.4	7,442.2	34.9	36.6	84.27	-1,246.7	1,381.1	369.6	299.7	69.92	5.286		
7,800.0	7,570.9	7,825.1	7,537.4	35.4	37.1	83.70	-1,266.6	1,403.5	375.9	305.1	70.81	5.309		
7,900.0	7,667.6	7,924.8	7,632.5	35.9	37.7	83.14	-1,286.5	1,425.8	382.3	310.6	71.70	5.332		
8,000.0	7,764.4	8,024.6	7,727.6	36.3	38.2	82.60	-1,306.4	1,448.1	388.7	316.1	72.58	5.355		
8,100.0	7,861.1	8,124.3	7,822.8	36.8	38.8	82.08	-1,326.3	1,470.5	395.1	321.7	73.46	5.379		
8,200.0	7,957.9	8,224.0	7,917.9	37.3	39.4	81.58	-1,346.2	1,492.8	401.6	327.3	74.34	5.402		
8,300.0	8,054.7	8,324.4	8,013.6	37.8	39.9	81.09	-1,366.2	1,515.3	408.1	332.9	75.21	5.426		
8,400.0	8,151.5	8,429.3	8,114.5	38.3	40.5	80.61	-1,385.7	1,537.1	413.9	337.7	76.11	5.437		
8,500.0	8,248.9	8,534.5	8,216.4	38.7	40.9	80.90	-1,402.7	1,556.2	418.8	341.9	76.93	5.444		
8,600.0	8,347.1	8,639.7	8,319.4	39.0	41.3	80.88	-1,417.2	1,572.4	423.0	345.4	77.64	5.449		
8,700.0	8,445.9	8,745.1	8,423.2	39.3	41.6	80.85	-1,429.1	1,585.9	426.6	348.3	78.22	5.453		
8,800.0	8,545.2	8,850.5	8,527.7	39.5	41.9	80.80	-1,438.6	1,596.5	429.4	350.7	78.69	5.456		
8,900.0	8,644.8	8,956.1	8,632.7	39.7	42.1	80.74	-1,445.5	1,604.2	431.4	352.4	79.04	5.458		
9,000.0	8,744.7	9,061.7	8,738.1	39.8	42.2	80.67	-1,449.8	1,609.0	432.8	353.5	79.28	5.459		
9,100.0	8,844.6	9,167.3	8,843.7	39.9	42.3	-39.05	-1,451.5	1,611.0	433.4	354.0	79.41	5.458		
9,200.0	8,944.6	9,267.0	8,943.4	40.0	42.4	-39.06	-1,451.6	1,610.9	433.3	353.8	79.54	5.448		
9,300.0	9,044.6	9,365.6	9,042.0	40.0	42.5	-39.07	-1,451.9	1,610.4	433.2	353.6	79.66	5.439		
9,400.0	9,144.6	9,464.1	9,140.5	40.1	42.5	-39.08	-1,452.4	1,609.5	433.2	353.4	79.77	5.430		
9,469.3	9,213.9	9,532.8	9,209.2	40.1	42.6	-39.08	-1,452.8	1,608.7	433.2	353.3	79.85	5.425		
9,500.0	9,244.6	9,563.6	9,240.0	40.2	42.6	-39.08	-1,453.1	1,608.3	433.1	353.3	79.89	5.422		
9,600.0	9,344.6	9,663.6	9,340.0	40.2	42.6	-39.08	-1,453.7	1,607.1	433.1	353.1	80.01	5.414		
9,700.0	9,444.6	9,763.6	9,439.9	40.3	42.7	-39.08	-1,454.4	1,605.9	433.1	353.0	80.13	5.406		
9,800.0	9,544.6	9,863.6	9,539.9	40.3	42.8	-39.08	-1,455.1	1,604.7	433.1	352.9	80.25	5.398		
9,900.0	9,644.6	9,963.6	9,639.9	40.4	42.8	-39.08	-1,455.8	1,603.5	433.1	352.8	80.37	5.389		
10,000.0	9,744.6	10,063.6	9,739.9	40.5	42.9	-39.08	-1,456.5	1,602.3	433.1	352.6	80.49	5.381		
10,100.0	9,844.6	10,163.6	9,839.9	40.5	43.0	-39.08	-1,457.2	1,601.1	433.1	352.5	80.62	5.373		

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 LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 D21 595 Pad - LR06C D21 595 - 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		
10,200.0	9,944.6	10,263.6	9,939.9	40.6	43.0	-39.08	-1,457.9	1,599.9	433.1	352.4	80.75	5.364		
10,300.0	10,044.5	10,363.6	10,039.9	40.7	43.1	-39.08	-1,458.6	1,598.7	433.1	352.3	80.87	5.356		
10,400.0	10,144.5	10,463.6	10,139.9	40.7	43.2	-39.08	-1,459.3	1,597.5	433.1	352.1	81.00	5.347		
10,500.0	10,244.5	10,563.6	10,239.9	40.8	43.2	-39.08	-1,460.0	1,596.3	433.1	352.0	81.13	5.339		
10,600.0	10,344.5	10,663.6	10,339.9	40.9	43.3	-39.07	-1,460.7	1,595.1	433.1	351.9	81.27	5.330		
10,700.0	10,444.5	10,763.6	10,439.8	40.9	43.4	-39.07	-1,461.4	1,593.9	433.1	351.7	81.40	5.321		
10,800.0	10,544.5	10,863.6	10,539.8	41.0	43.4	-39.07	-1,462.1	1,592.7	433.1	351.6	81.53	5.312		
10,900.0	10,644.5	10,963.6	10,639.8	41.1	43.5	-39.07	-1,462.7	1,591.5	433.1	351.5	81.67	5.304		
11,000.0	10,744.5	11,063.6	10,739.8	41.2	43.6	-39.07	-1,463.4	1,590.3	433.1	351.3	81.81	5.295		
11,100.0	10,844.5	11,163.6	10,839.8	41.2	43.6	-39.07	-1,464.1	1,589.1	433.1	351.2	81.95	5.286		
11,200.0	10,944.5	11,263.6	10,939.8	41.3	43.7	-39.07	-1,464.8	1,587.9	433.2	351.1	82.09	5.277		
11,300.0	11,044.5	11,363.6	11,039.8	41.4	43.8	-39.07	-1,465.5	1,586.7	433.2	350.9	82.23	5.268		
11,400.0	11,144.4	11,463.6	11,139.8	41.4	43.9	-39.07	-1,466.2	1,585.5	433.2	350.8	82.37	5.259		
11,500.0	11,244.4	11,563.6	11,239.8	41.5	43.9	-39.07	-1,466.9	1,584.3	433.2	350.6	82.51	5.250		
11,600.0	11,344.4	11,663.6	11,339.8	41.6	44.0	-39.07	-1,467.6	1,583.1	433.2	350.5	82.66	5.240		
11,700.0	11,444.4	11,763.6	11,439.8	41.7	44.1	-39.07	-1,468.3	1,581.9	433.2	350.4	82.80	5.231		
11,800.0	11,544.4	11,863.6	11,539.7	41.7	44.2	-39.07	-1,469.0	1,580.7	433.2	350.2	82.95	5.222		
11,900.0	11,644.4	11,963.6	11,639.7	41.8	44.2	-39.07	-1,469.7	1,579.5	433.2	350.1	83.10	5.213		
12,000.0	11,744.4	12,063.6	11,739.7	41.9	44.3	-39.07	-1,470.4	1,578.3	433.2	349.9	83.25	5.203		
12,100.0	11,844.4	12,163.6	11,839.7	42.0	44.4	-39.07	-1,471.1	1,577.1	433.2	349.8	83.40	5.194		
12,146.6	11,891.0	12,210.2	11,886.3	42.0	44.4	-39.07	-1,471.4	1,576.5	433.2	349.7	83.47	5.189		

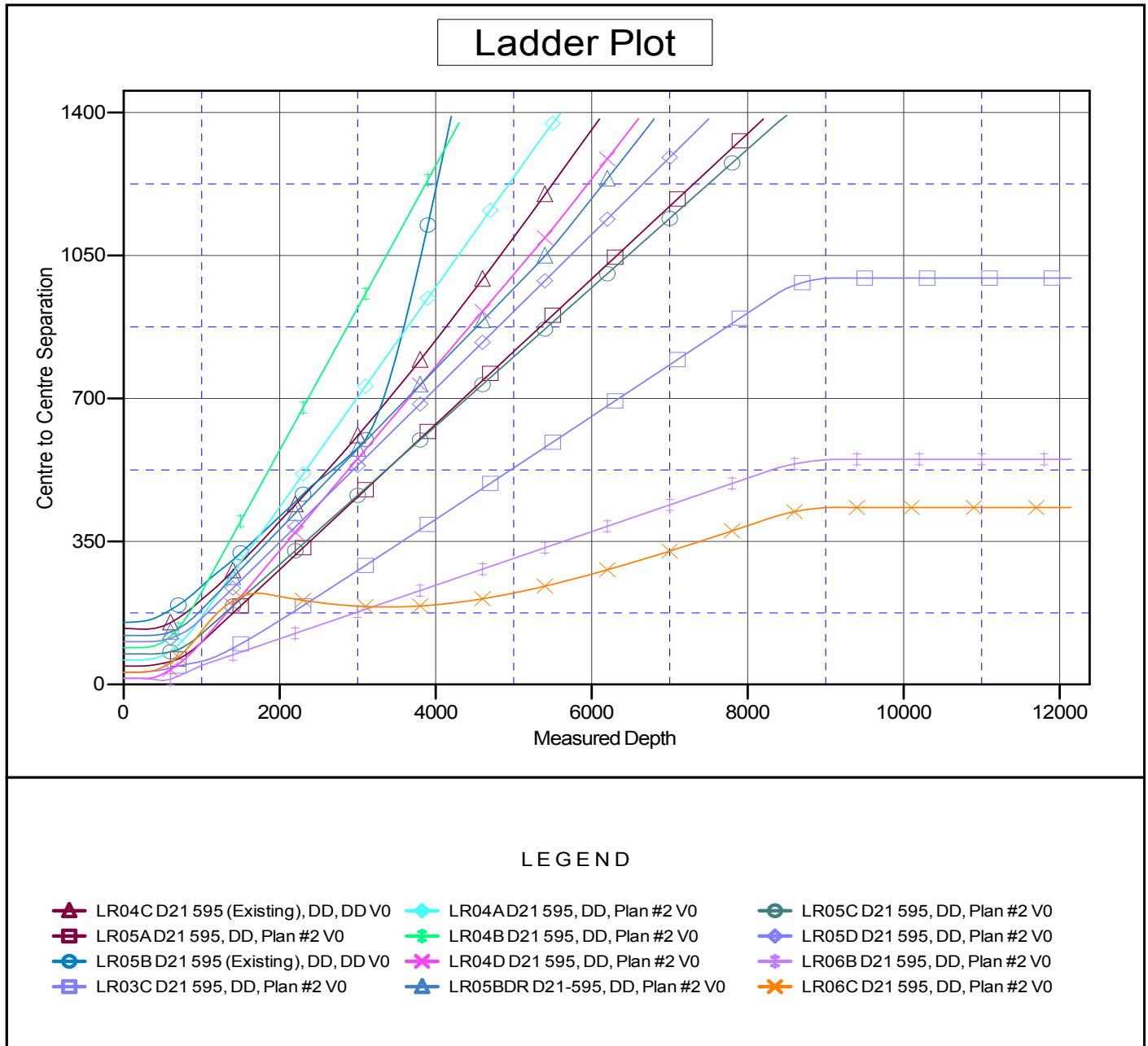
Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well LR06D D21 595
Project:	Garfield County	TVD Reference:	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	MD Reference:	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR06D D21 595	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 @ 8278.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: LR06D D21 595
 Coordinate System is US State Plane 1983, Colorado Central Zone
 Grid Convergence at Surface is: -1.62°



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