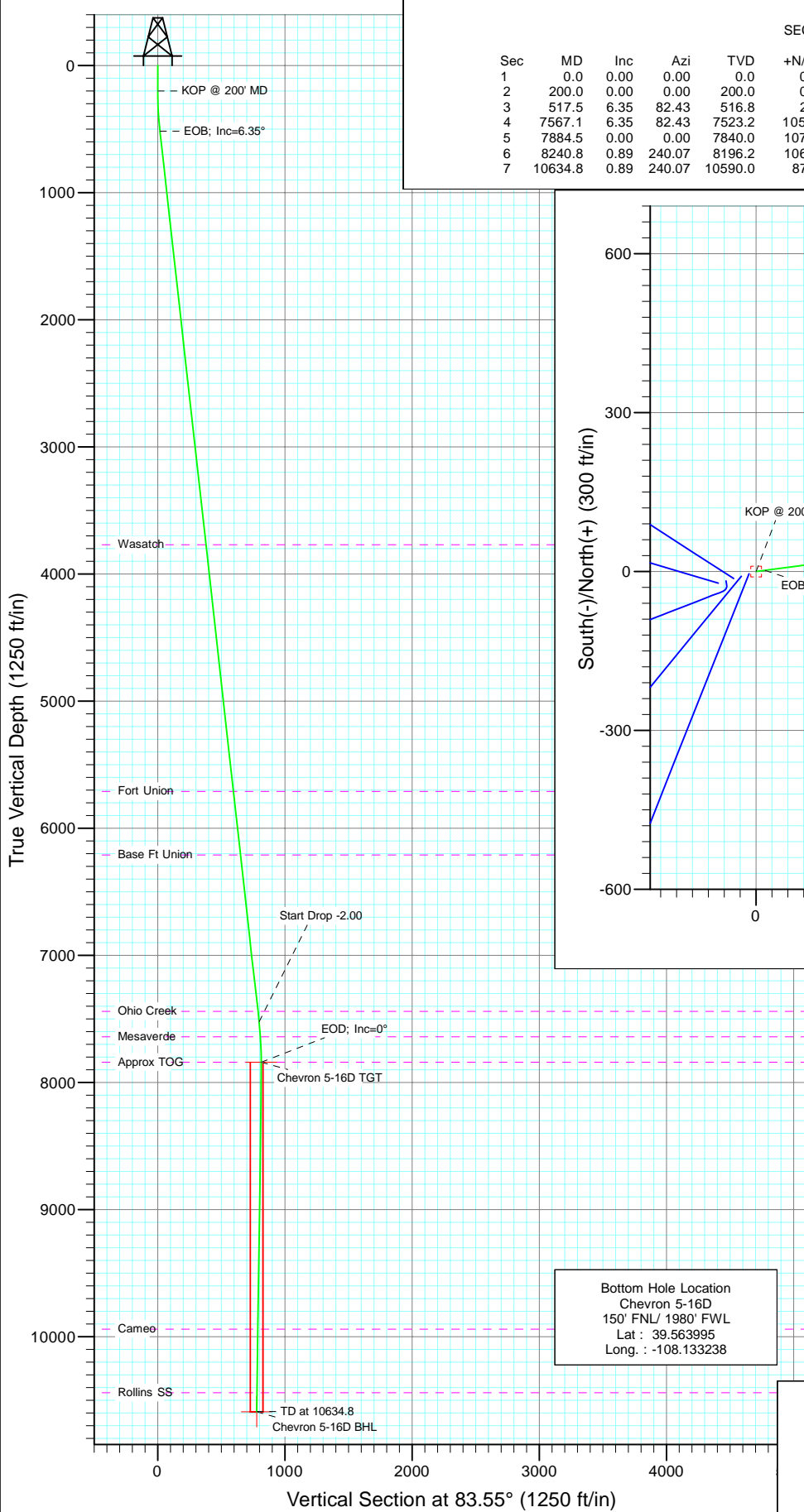
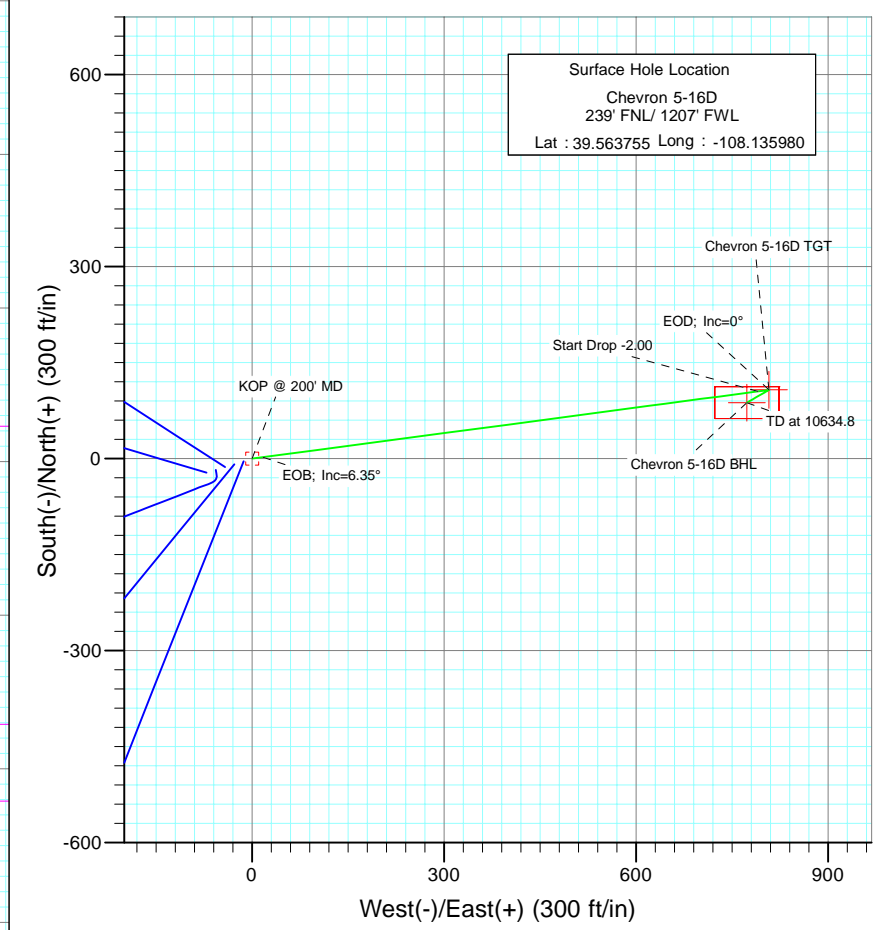




Project: Garfield County  
Site: Chevron D05 696 Pad  
Well: Chevron 5-16D  
Wellbore: DD  
Design: Plan #3



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	517.5	6.35	82.43	516.8	2.3	17.4	2.00	82.43	17.6	
4	7567.1	6.35	82.43	7523.2	105.1	790.2	0.00	0.00	797.0	
5	7884.5	0.00	0.00	7840.0	107.4	807.6	2.00	180.00	814.6	Chevron 5-16D TGT
6	8240.8	0.89	240.07	8196.2	106.0	805.3	0.25	240.07	812.1	
7	10634.8	0.89	240.07	10590.0	87.4	773.0	0.00	0.00	777.9	Chevron 5-16D BHL



Azimuths to True North  
Magnetic North: 10.73°

Magnetic Field  
Strength: 52533.2snT  
Dip Angle: 65.85°  
Date: 11/24/2008  
Model: IGRF200510

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3770.0	3790.7	Wasatch
5710.0	5742.7	Fort Union
6210.0	6245.8	Base Ft Union
7440.0	7483.4	Ohio Creek
7640.0	7684.4	Mesaverde
7840.0	7884.5	Approx TOG
9940.0	9984.8	Cameo
10440.0	10484.8	Rollins SS

DESIGN DETAILS: Plan #3					
95XXX; BH					
KBE @ 8160.0ft (Original Well Elev)					
Target	Azimuth	Origin	N/S	E/W	From TVD
Chevron 5-16D BHL	83.55	Slot	0.0	0.0	0.0

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Project:</b>	Garfield County	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site:</b>	Chevron D05 696 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

<b>Project</b>	Garfield County		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

Site		Chevron D05 696 Pad			
Site Position:		Northing:	1,641,014.90 ft	Latitude:	39.563760
From:	Lat/Long	Easting:	2,256,856.29 ft	Longitude:	-108.136313
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.66 °

Well	Chevron 5-16D					
Well Position	+N/-S	0.0 ft	Northing:	1,641,010.35 ft	Latitude:	39.563755
	+E/-W	0.0 ft	Easting:	2,256,950.08 ft	Longitude:	-108.135980
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,142.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	11/24/2008	10.73	65.85	52,533

<b>Design</b>	Plan #3			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	83.55

<b>Plan Sections</b>										
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	
517.5	6.35	82.43	516.8	2.3	17.4	2.00	2.00	0.00	82.43	
7,567.1	6.35	82.43	7,523.2	105.1	790.2	0.00	0.00	0.00	0.00	
7,884.5	0.00	0.00	7,840.0	107.4	807.6	2.00	-2.00	0.00	180.00	Chevron 5-16D TGT
8,240.8	0.89	240.07	8,196.2	106.0	805.3	0.25	0.25	-33.67	240.07	
10,634.8	0.89	240.07	10,590.0	87.4	773.0	0.00	0.00	0.00	0.00	Chevron 5-16D BHL

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Project:</b>	Garfield County	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site:</b>	Chevron D05 696 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

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	82.43	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	82.43	240.0	0.0	0.3	0.3	2.00	2.00	
270.0	1.40	82.43	270.0	0.1	0.8	0.9	2.00	2.00	
300.0	2.00	82.43	300.0	0.2	1.7	1.7	2.00	2.00	
330.0	2.60	82.43	330.0	0.4	2.9	2.9	2.00	2.00	
360.0	3.20	82.43	359.9	0.6	4.4	4.5	2.00	2.00	
390.0	3.80	82.43	389.9	0.8	6.2	6.3	2.00	2.00	
420.0	4.40	82.43	419.8	1.1	8.4	8.4	2.00	2.00	
450.0	5.00	82.43	449.7	1.4	10.8	10.9	2.00	2.00	
480.0	5.60	82.43	479.6	1.8	13.6	13.7	2.00	2.00	
510.0	6.20	82.43	509.4	2.2	16.6	16.8	2.00	2.00	
517.5	6.35	82.43	516.8	2.3	17.4	17.6	2.00	2.00	EOB; Inc=6.35°
540.0	6.35	82.43	539.2	2.6	19.9	20.1	0.00	0.00	
570.0	6.35	82.43	569.0	3.1	23.2	23.4	0.00	0.00	
600.0	6.35	82.43	598.8	3.5	26.5	26.7	0.00	0.00	
630.0	6.35	82.43	628.7	4.0	29.8	30.0	0.00	0.00	
660.0	6.35	82.43	658.5	4.4	33.0	33.3	0.00	0.00	
690.0	6.35	82.43	688.3	4.8	36.3	36.6	0.00	0.00	
720.0	6.35	82.43	718.1	5.3	39.6	40.0	0.00	0.00	
750.0	6.35	82.43	747.9	5.7	42.9	43.3	0.00	0.00	
780.0	6.35	82.43	777.7	6.1	46.2	46.6	0.00	0.00	
810.0	6.35	82.43	807.6	6.6	49.5	49.9	0.00	0.00	
840.0	6.35	82.43	837.4	7.0	52.8	53.2	0.00	0.00	
870.0	6.35	82.43	867.2	7.5	56.1	56.5	0.00	0.00	
900.0	6.35	82.43	897.0	7.9	59.4	59.9	0.00	0.00	
930.0	6.35	82.43	926.8	8.3	62.6	63.2	0.00	0.00	
960.0	6.35	82.43	956.6	8.8	65.9	66.5	0.00	0.00	
990.0	6.35	82.43	986.5	9.2	69.2	69.8	0.00	0.00	
1,020.0	6.35	82.43	1,016.3	9.6	72.5	73.1	0.00	0.00	
1,050.0	6.35	82.43	1,046.1	10.1	75.8	76.5	0.00	0.00	
1,080.0	6.35	82.43	1,075.9	10.5	79.1	79.8	0.00	0.00	
1,110.0	6.35	82.43	1,105.7	11.0	82.4	83.1	0.00	0.00	
1,140.0	6.35	82.43	1,135.5	11.4	85.7	86.4	0.00	0.00	
1,170.0	6.35	82.43	1,165.3	11.8	89.0	89.7	0.00	0.00	
1,200.0	6.35	82.43	1,195.2	12.3	92.2	93.0	0.00	0.00	
1,230.0	6.35	82.43	1,225.0	12.7	95.5	96.4	0.00	0.00	
1,260.0	6.35	82.43	1,254.8	13.1	98.8	99.7	0.00	0.00	
1,290.0	6.35	82.43	1,284.6	13.6	102.1	103.0	0.00	0.00	
1,320.0	6.35	82.43	1,314.4	14.0	105.4	106.3	0.00	0.00	
1,350.0	6.35	82.43	1,344.2	14.5	108.7	109.6	0.00	0.00	
1,380.0	6.35	82.43	1,374.1	14.9	112.0	112.9	0.00	0.00	
1,410.0	6.35	82.43	1,403.9	15.3	115.3	116.3	0.00	0.00	
1,440.0	6.35	82.43	1,433.7	15.8	118.6	119.6	0.00	0.00	
1,470.0	6.35	82.43	1,463.5	16.2	121.8	122.9	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Project:</b>	Garfield County	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site:</b>	Chevron D05 696 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

### 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	6.35	82.43	1,493.3	16.6	125.1	126.2	0.00	0.00	
1,530.0	6.35	82.43	1,523.1	17.1	128.4	129.5	0.00	0.00	
1,560.0	6.35	82.43	1,553.0	17.5	131.7	132.8	0.00	0.00	
1,590.0	6.35	82.43	1,582.8	18.0	135.0	136.2	0.00	0.00	
1,620.0	6.35	82.43	1,612.6	18.4	138.3	139.5	0.00	0.00	
1,650.0	6.35	82.43	1,642.4	18.8	141.6	142.8	0.00	0.00	
1,680.0	6.35	82.43	1,672.2	19.3	144.9	146.1	0.00	0.00	
1,710.0	6.35	82.43	1,702.0	19.7	148.2	149.4	0.00	0.00	
1,740.0	6.35	82.43	1,731.9	20.1	151.4	152.7	0.00	0.00	
1,770.0	6.35	82.43	1,761.7	20.6	154.7	156.1	0.00	0.00	
1,800.0	6.35	82.43	1,791.5	21.0	158.0	159.4	0.00	0.00	
1,830.0	6.35	82.43	1,821.3	21.5	161.3	162.7	0.00	0.00	
1,860.0	6.35	82.43	1,851.1	21.9	164.6	166.0	0.00	0.00	
1,890.0	6.35	82.43	1,880.9	22.3	167.9	169.3	0.00	0.00	
1,920.0	6.35	82.43	1,910.7	22.8	171.2	172.6	0.00	0.00	
1,950.0	6.35	82.43	1,940.6	23.2	174.5	176.0	0.00	0.00	
1,980.0	6.35	82.43	1,970.4	23.6	177.7	179.3	0.00	0.00	
2,010.0	6.35	82.43	2,000.2	24.1	181.0	182.6	0.00	0.00	
2,040.0	6.35	82.43	2,030.0	24.5	184.3	185.9	0.00	0.00	
2,070.0	6.35	82.43	2,059.8	24.9	187.6	189.2	0.00	0.00	
2,100.0	6.35	82.43	2,089.6	25.4	190.9	192.5	0.00	0.00	
2,130.0	6.35	82.43	2,119.5	25.8	194.2	195.9	0.00	0.00	
2,160.0	6.35	82.43	2,149.3	26.3	197.5	199.2	0.00	0.00	
2,190.0	6.35	82.43	2,179.1	26.7	200.8	202.5	0.00	0.00	
2,220.0	6.35	82.43	2,208.9	27.1	204.1	205.8	0.00	0.00	
2,250.0	6.35	82.43	2,238.7	27.6	207.3	209.1	0.00	0.00	
2,280.0	6.35	82.43	2,268.5	28.0	210.6	212.5	0.00	0.00	
2,310.0	6.35	82.43	2,298.4	28.4	213.9	215.8	0.00	0.00	
2,340.0	6.35	82.43	2,328.2	28.9	217.2	219.1	0.00	0.00	
2,370.0	6.35	82.43	2,358.0	29.3	220.5	222.4	0.00	0.00	
2,400.0	6.35	82.43	2,387.8	29.8	223.8	225.7	0.00	0.00	
2,430.0	6.35	82.43	2,417.6	30.2	227.1	229.0	0.00	0.00	
2,460.0	6.35	82.43	2,447.4	30.6	230.4	232.4	0.00	0.00	
2,490.0	6.35	82.43	2,477.3	31.1	233.7	235.7	0.00	0.00	

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Chevron 5-16D BHL	0.00	0.00	10,590.0	87.4	773.0	1,641,075.34	2,257,725.30	39.563995	-108.133238
- plan misses target center by 8130.9ft at 2490.0ft MD (2477.3 TVD, 31.1 N, 233.7 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
Chevron 5-16D TGT	0.00	0.00	7,840.0	107.4	807.6	1,641,094.27	2,257,760.51	39.564050	-108.133115
- plan misses target center by 5393.9ft at 2490.0ft MD (2477.3 TVD, 31.1 N, 233.7 E)									
- Point									

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Project:</b>	Garfield County	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site:</b>	Chevron D05 696 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

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	6.35	82.43	2,487.2	31.2	234.8	236.8	0.00	0.00	
2,600.0	6.35	82.43	2,586.6	32.7	245.7	247.8	0.00	0.00	
2,700.0	6.35	82.43	2,686.0	34.1	256.7	258.9	0.00	0.00	
2,800.0	6.35	82.43	2,785.3	35.6	267.6	269.9	0.00	0.00	
2,900.0	6.35	82.43	2,884.7	37.0	278.6	281.0	0.00	0.00	
3,000.0	6.35	82.43	2,984.1	38.5	289.6	292.1	0.00	0.00	
3,100.0	6.35	82.43	3,083.5	40.0	300.5	303.1	0.00	0.00	
3,200.0	6.35	82.43	3,182.9	41.4	311.5	314.2	0.00	0.00	
3,300.0	6.35	82.43	3,282.3	42.9	322.5	325.2	0.00	0.00	
3,400.0	6.35	82.43	3,381.7	44.3	333.4	336.3	0.00	0.00	
3,500.0	6.35	82.43	3,481.1	45.8	344.4	347.3	0.00	0.00	
3,600.0	6.35	82.43	3,580.4	47.3	355.3	358.4	0.00	0.00	
3,700.0	6.35	82.43	3,679.8	48.7	366.3	369.5	0.00	0.00	
3,790.7	6.35	82.43	3,770.0	50.0	376.2	379.5	0.00	0.00	Wasatch
3,800.0	6.35	82.43	3,779.2	50.2	377.3	380.5	0.00	0.00	
3,900.0	6.35	82.43	3,878.6	51.6	388.2	391.6	0.00	0.00	
4,000.0	6.35	82.43	3,978.0	53.1	399.2	402.6	0.00	0.00	
4,100.0	6.35	82.43	4,077.4	54.5	410.2	413.7	0.00	0.00	
4,200.0	6.35	82.43	4,176.8	56.0	421.1	424.7	0.00	0.00	
4,300.0	6.35	82.43	4,276.1	57.5	432.1	435.8	0.00	0.00	
4,400.0	6.35	82.43	4,375.5	58.9	443.0	446.9	0.00	0.00	
4,500.0	6.35	82.43	4,474.9	60.4	454.0	457.9	0.00	0.00	
4,600.0	6.35	82.43	4,574.3	61.8	465.0	469.0	0.00	0.00	
4,700.0	6.35	82.43	4,673.7	63.3	475.9	480.0	0.00	0.00	
4,800.0	6.35	82.43	4,773.1	64.7	486.9	491.1	0.00	0.00	
4,900.0	6.35	82.43	4,872.5	66.2	497.9	502.1	0.00	0.00	
5,000.0	6.35	82.43	4,971.9	67.7	508.8	513.2	0.00	0.00	
5,100.0	6.35	82.43	5,071.2	69.1	519.8	524.3	0.00	0.00	
5,200.0	6.35	82.43	5,170.6	70.6	530.7	535.3	0.00	0.00	
5,300.0	6.35	82.43	5,270.0	72.0	541.7	546.4	0.00	0.00	
5,400.0	6.35	82.43	5,369.4	73.5	552.7	557.4	0.00	0.00	
5,500.0	6.35	82.43	5,468.8	75.0	563.6	568.5	0.00	0.00	
5,600.0	6.35	82.43	5,568.2	76.4	574.6	579.5	0.00	0.00	
5,700.0	6.35	82.43	5,667.6	77.9	585.6	590.6	0.00	0.00	
5,742.7	6.35	82.43	5,710.0	78.5	590.2	595.3	0.00	0.00	Fort Union
5,800.0	6.35	82.43	5,766.9	79.3	596.5	601.7	0.00	0.00	
5,900.0	6.35	82.43	5,866.3	80.8	607.5	612.7	0.00	0.00	
6,000.0	6.35	82.43	5,965.7	82.2	618.4	623.8	0.00	0.00	
6,100.0	6.35	82.43	6,065.1	83.7	629.4	634.8	0.00	0.00	
6,200.0	6.35	82.43	6,164.5	85.2	640.4	645.9	0.00	0.00	
6,245.8	6.35	82.43	6,210.0	85.8	645.4	650.9	0.00	0.00	Base Ft Union
6,300.0	6.35	82.43	6,263.9	86.6	651.3	656.9	0.00	0.00	
6,400.0	6.35	82.43	6,363.3	88.1	662.3	668.0	0.00	0.00	
6,500.0	6.35	82.43	6,462.7	89.5	673.3	679.1	0.00	0.00	
6,600.0	6.35	82.43	6,562.0	91.0	684.2	690.1	0.00	0.00	
6,700.0	6.35	82.43	6,661.4	92.4	695.2	701.2	0.00	0.00	
6,800.0	6.35	82.43	6,760.8	93.9	706.1	712.2	0.00	0.00	
6,900.0	6.35	82.43	6,860.2	95.4	717.1	723.3	0.00	0.00	
7,000.0	6.35	82.43	6,959.6	96.8	728.1	734.3	0.00	0.00	
7,100.0	6.35	82.43	7,059.0	98.3	739.0	745.4	0.00	0.00	
7,200.0	6.35	82.43	7,158.4	99.7	750.0	756.4	0.00	0.00	
7,300.0	6.35	82.43	7,257.7	101.2	761.0	767.5	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Project:</b>	Garfield County	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site:</b>	Chevron D05 696 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

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
7,400.0	6.35	82.43	7,357.1	102.6	771.9	778.6	0.00	0.00	
7,483.4	6.35	82.43	7,440.0	103.9	781.1	787.8	0.00	0.00	Ohio Creek
7,500.0	6.35	82.43	7,456.5	104.1	782.9	789.6	0.00	0.00	
7,567.1	6.35	82.43	7,523.2	105.1	790.2	797.0	0.00	0.00	Start Drop -2.00
7,600.0	5.69	82.43	7,555.9	105.5	793.7	800.5	2.00	-2.00	
7,684.4	4.00	82.43	7,640.0	106.5	800.7	807.6	2.00	-2.00	Mesaverde
7,700.0	3.69	82.43	7,655.6	106.6	801.8	808.7	2.00	-2.00	
7,800.0	1.69	82.43	7,755.5	107.2	806.4	813.4	2.00	-2.00	
7,884.5	0.00	0.00	7,840.0	107.4	807.6	814.6	2.00	-2.00	EOD; Inc=0° - Approx TOG - Chevron 5-16D TC
7,900.0	0.04	240.07	7,855.5	107.4	807.6	814.6	0.25	0.25	
8,000.0	0.29	240.07	7,955.5	107.3	807.4	814.3	0.25	0.25	
8,100.0	0.54	240.07	8,055.5	106.9	806.8	813.7	0.25	0.25	
8,200.0	0.79	240.07	8,155.4	106.3	805.8	812.6	0.25	0.25	
8,240.8	0.89	240.07	8,196.2	106.0	805.3	812.1	0.25	0.25	
8,300.0	0.89	240.07	8,255.4	105.6	804.5	811.2	0.00	0.00	
8,400.0	0.89	240.07	8,355.4	104.8	803.1	809.8	0.00	0.00	
8,500.0	0.89	240.07	8,455.4	104.0	801.8	808.4	0.00	0.00	
8,600.0	0.89	240.07	8,555.4	103.2	800.4	806.9	0.00	0.00	
8,700.0	0.89	240.07	8,655.4	102.5	799.1	805.5	0.00	0.00	
8,800.0	0.89	240.07	8,755.4	101.7	797.7	804.1	0.00	0.00	
8,900.0	0.89	240.07	8,855.4	100.9	796.4	802.7	0.00	0.00	
9,000.0	0.89	240.07	8,955.4	100.1	795.0	801.2	0.00	0.00	
9,100.0	0.89	240.07	9,055.3	99.4	793.7	799.8	0.00	0.00	
9,200.0	0.89	240.07	9,155.3	98.6	792.3	798.4	0.00	0.00	
9,300.0	0.89	240.07	9,255.3	97.8	791.0	797.0	0.00	0.00	
9,400.0	0.89	240.07	9,355.3	97.0	789.6	795.5	0.00	0.00	
9,500.0	0.89	240.07	9,455.3	96.3	788.3	794.1	0.00	0.00	
9,600.0	0.89	240.07	9,555.3	95.5	786.9	792.7	0.00	0.00	
9,700.0	0.89	240.07	9,655.3	94.7	785.6	791.3	0.00	0.00	
9,800.0	0.89	240.07	9,755.3	93.9	784.2	789.8	0.00	0.00	
9,900.0	0.89	240.07	9,855.2	93.1	782.9	788.4	0.00	0.00	
9,984.8	0.89	240.07	9,940.0	92.5	781.8	787.2	0.00	0.00	Cameo
10,000.0	0.89	240.07	9,955.2	92.4	781.6	787.0	0.00	0.00	
10,100.0	0.89	240.07	10,055.2	91.6	780.2	785.6	0.00	0.00	
10,200.0	0.89	240.07	10,155.2	90.8	778.9	784.1	0.00	0.00	
10,300.0	0.89	240.07	10,255.2	90.0	777.5	782.7	0.00	0.00	
10,400.0	0.89	240.07	10,355.2	89.3	776.2	781.3	0.00	0.00	
10,484.8	0.89	240.07	10,440.0	88.6	775.0	780.1	0.00	0.00	Rollins SS
10,500.0	0.89	240.07	10,455.2	88.5	774.8	779.9	0.00	0.00	
10,600.0	0.89	240.07	10,555.2	87.7	773.5	778.4	0.00	0.00	
10,634.8	0.89	240.07	10,590.0	87.4	773.0	777.9	0.00	0.00	TD at 10634.8 - Chevron 5-16D BHL

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Project:</b>	Garfield County	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site:</b>	Chevron D05 696 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Chevron 5-16D BHL	0.00	0.00	10,590.0	87.4	773.0	1,641,075.34	2,257,725.30	39.563995	-108.133238
- plan hits target center									
- Rectangle (sides W50.0 H100.0 D0.0)									
Chevron 5-16D TGT	0.00	0.00	7,840.0	107.4	807.6	1,641,094.27	2,257,760.51	39.564050	-108.133115
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
3,790.7	3,770.0	Wasatch		0.00		
5,742.7	5,710.0	Fort Union		0.00		
6,245.8	6,210.0	Base Ft Union		0.00		
7,483.4	7,440.0	Ohio Creek		0.00		
7,684.4	7,640.0	Mesaverde		0.00		
7,884.5	7,840.0	Approx TOG		0.00		
9,984.8	9,940.0	Cameo		0.00		
10,484.8	10,440.0	Rollins SS		0.00		

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
200.0	200.0	0.0	0.0	KOP @ 200' MD	
517.5	516.8	2.3	17.4	EOB; Inc=6.35°	
7,567.1	7,523.2	105.1	790.2	Start Drop -2.00	
7,884.5	7,840.0	107.4	807.6	EOD; Inc=0°	
10,634.8	10,590.0	87.4	773.0	TD at 10634.8	

# **Berry Petroleum Company (NAD 83)**

**Garfield County  
Chevron D05 696 Pad  
Chevron 5-16D  
DD  
Plan #3**

## **Anticollision Report**

**22 November, 2010**



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #3		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0ft	<b>Error Model:</b>	Systematic Ellipse
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 1,221.6ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b>	11/22/2010		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	10,634.8	Plan #3 (DD)	MWD	Geolink MWD

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (ft)</b>	<b>Offset Measured Depth (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Distance Between Ellipses (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Offset Well - Wellbore - Design</b>						
Chevron D05 696 Pad						
Chevron 35-1D - DD - Plan #4	200.0	200.0	44.3	43.6	69.699	CC, ES
Chevron 35-1D - DD - Plan #4	400.0	397.2	55.9	54.6	41.813	SF
Chevron 5-24D - DD - Plan #2	200.0	200.0	13.8	13.2	21.790	CC, ES
Chevron 5-24D - DD - Plan #2	300.0	300.0	15.6	14.6	15.820	SF
Chevron 5-26D - DD - Plan #2	200.0	200.0	29.0	28.3	45.615	CC, ES
Chevron 5-26D - DD - Plan #2	400.0	397.5	41.7	40.4	31.256	SF
Chevron 5-27D - DD - Plan #3	200.0	200.0	74.3	73.7	117.002	CC, ES
Chevron 5-27D - DD - Plan #3	1,100.0	1,091.4	157.1	153.4	41.807	SF
Chevron 5-28D - DD - Plan #4	200.0	200.0	59.3	58.7	92.333	CC, ES
Chevron 5-28D - DD - Plan #4	600.0	593.4	94.1	92.0	45.425	SF

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Chevron D05 696 Pad - Chevron 35-1D - DD - Plan #4													Offset Site Error: 0.0 ft			
Survey Program: 0-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							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	-107.24	-13.1	-42.3	44.3							
100.0	100.0	100.0	100.0	0.1	0.1	-107.24	-13.1	-42.3	44.3	44.0	0.29	154.697				
200.0	200.0	200.0	200.0	0.3	0.3	-107.24	-13.1	-42.3	44.3	43.6	0.64	69.699	CC, ES			
300.0	300.0	298.9	298.9	0.5	0.5	172.27	-12.2	-43.7	47.1	46.2	0.98	47.891				
400.0	399.8	397.2	397.0	0.7	0.7	176.86	-9.4	-48.0	55.9	54.6	1.34	41.813	SF			
500.0	499.5	494.3	493.7	0.9	0.9	-178.08	-4.9	-55.0	71.1	69.4	1.70	41.938				
600.0	598.8	590.9	589.8	1.2	1.1	-173.84	1.1	-64.4	91.3	89.3	2.06	44.384				
700.0	698.2	688.6	686.7	1.4	1.4	-170.99	7.5	-74.2	112.3	109.8	2.42	46.350				
800.0	797.6	786.2	783.7	1.7	1.7	-169.04	13.8	-84.1	133.4	130.6	2.79	47.857				
900.0	897.0	883.9	880.6	1.9	1.9	-167.63	20.2	-93.9	154.6	151.5	3.15	49.040				
1,000.0	996.4	981.6	977.6	2.2	2.2	-166.55	26.5	-103.8	176.0	172.4	3.52	49.989				
1,100.0	1,095.8	1,079.2	1,074.5	2.4	2.4	-165.71	32.9	-113.6	197.3	193.4	3.89	50.766				
1,200.0	1,195.2	1,176.9	1,171.5	2.7	2.7	-165.03	39.2	-123.5	218.7	214.5	4.25	51.413				
1,300.0	1,294.6	1,274.5	1,268.4	2.9	3.0	-164.48	45.6	-133.4	240.1	235.5	4.62	51.959				
1,400.0	1,393.9	1,372.2	1,365.4	3.2	3.2	-164.01	51.9	-143.2	261.6	256.6	4.99	52.426				
1,500.0	1,493.3	1,469.8	1,462.3	3.5	3.5	-163.61	58.3	-153.1	283.0	277.6	5.36	52.829				
1,600.0	1,592.7	1,567.5	1,559.3	3.7	3.8	-163.28	64.7	-162.9	304.5	298.7	5.72	53.181				
1,700.0	1,692.1	1,665.1	1,656.2	4.0	4.0	-162.98	71.0	-172.8	325.9	319.8	6.09	53.491				
1,800.0	1,791.5	1,762.8	1,753.2	4.2	4.3	-162.72	77.4	-182.6	347.4	340.9	6.46	53.766				
1,900.0	1,890.9	1,860.5	1,850.1	4.5	4.6	-162.49	83.7	-192.5	368.9	362.0	6.83	54.012				
2,000.0	1,990.3	1,958.1	1,947.1	4.8	4.8	-162.29	90.1	-202.3	390.4	383.2	7.20	54.232				
2,100.0	2,089.6	2,055.8	2,044.0	5.0	5.1	-162.11	96.4	-212.2	411.9	404.3	7.57	54.431				
2,200.0	2,189.0	2,153.4	2,141.0	5.3	5.4	-161.95	102.8	-222.1	433.3	425.4	7.94	54.611				
2,300.0	2,288.4	2,251.1	2,237.9	5.5	5.6	-161.80	109.1	-231.9	454.8	446.5	8.30	54.776				
2,400.0	2,387.8	2,348.7	2,334.9	5.8	5.9	-161.66	115.5	-241.8	476.3	467.7	8.67	54.926				
2,500.0	2,487.2	2,446.4	2,431.8	6.1	6.2	-161.54	121.9	-251.6	497.8	488.8	9.04	55.064				
2,600.0	2,586.6	2,544.1	2,528.8	6.3	6.4	-161.43	128.2	-261.5	519.3	509.9	9.41	55.192				
2,700.0	2,686.0	2,641.7	2,625.7	6.6	6.7	-161.32	134.6	-271.3	540.8	531.1	9.78	55.310				
2,800.0	2,785.3	2,739.4	2,722.7	6.9	7.0	-161.22	140.9	-281.2	562.4	552.2	10.15	55.419				
2,900.0	2,884.7	2,837.0	2,819.6	7.1	7.2	-161.14	147.3	-291.0	583.9	573.3	10.52	55.520				
3,000.0	2,984.1	2,934.7	2,916.6	7.4	7.5	-161.05	153.6	-300.9	605.4	594.5	10.88	55.615				
3,100.0	3,083.5	3,032.3	3,013.5	7.6	7.8	-160.98	160.0	-310.8	626.9	615.6	11.25	55.703				
3,200.0	3,182.9	3,130.0	3,110.4	7.9	8.0	-160.90	166.3	-320.6	648.4	636.8	11.62	55.786				
3,300.0	3,282.3	3,227.6	3,207.4	8.2	8.3	-160.84	172.7	-330.5	669.9	657.9	11.99	55.864				
3,400.0	3,381.7	3,325.3	3,304.3	8.4	8.6	-160.77	179.1	-340.3	691.4	679.0	12.36	55.937				
3,500.0	3,481.1	3,423.0	3,401.3	8.7	8.8	-160.71	185.4	-350.2	712.9	700.2	12.73	56.006				
3,600.0	3,580.4	3,520.6	3,498.2	8.9	9.1	-160.66	191.8	-360.0	734.4	721.3	13.10	56.071				
3,700.0	3,679.8	3,618.3	3,595.2	9.2	9.4	-160.61	198.1	-369.9	756.0	742.5	13.47	56.132				
3,800.0	3,779.2	3,715.9	3,692.1	9.5	9.6	-160.56	204.5	-379.7	777.5	763.6	13.84	56.190				
3,900.0	3,878.6	3,813.6	3,789.1	9.7	9.9	-160.51	210.8	-389.6	799.0	784.8	14.21	56.245				
4,000.0	3,978.0	3,911.2	3,886.0	10.0	10.2	-160.46	217.2	-399.5	820.5	805.9	14.57	56.298				
4,100.0	4,077.4	4,008.9	3,983.0	10.2	10.4	-160.42	223.5	-409.3	842.0	827.1	14.94	56.347				
4,200.0	4,176.8	4,106.5	4,079.9	10.5	10.7	-160.38	229.9	-419.2	863.5	848.2	15.31	56.395				
4,300.0	4,276.1	4,204.2	4,176.9	10.8	11.0	-160.34	236.3	-429.0	885.0	869.4	15.68	56.440				
4,400.0	4,375.5	4,301.9	4,273.8	11.0	11.2	-160.31	242.6	-438.9	906.6	890.5	16.05	56.483				
4,500.0	4,474.9	4,399.5	4,370.8	11.3	11.5	-160.27	249.0	-448.7	928.1	911.7	16.42	56.524				
4,600.0	4,574.3	4,497.2	4,467.7	11.5	11.8	-160.24	255.3	-458.6	949.6	932.8	16.79	56.563				
4,700.0	4,673.7	4,594.8	4,564.7	11.8	12.0	-160.21	261.7	-468.4	971.1	954.0	17.16	56.600				
4,800.0	4,773.1	4,692.5	4,661.6	12.1	12.3	-160.18	268.0	-478.3	992.6	975.1	17.53	56.636				
4,900.0	4,872.5	4,790.1	4,758.6	12.3	12.6	-160.15	274.4	-488.2	1,014.2	996.3	17.90	56.671				
5,000.0	4,971.9	4,887.8	4,855.5	12.6	12.8	-160.12	280.7	-498.0	1,035.7	1,017.4	18.26	56.704				
5,100.0	5,071.2	4,985.5	4,952.5	12.9	13.1	-160.09	287.1	-507.9	1,057.2	1,038.6	18.63	56.736				

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Chevron D05 696 Pad - Chevron 35-1D - DD - Plan #4													<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD													<b>Offset Well Error:</b>	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	5,170.6	5,083.1	5,049.4	13.1	13.4	-160.07	293.5	-517.7	1,078.7	1,059.7	19.00	56.766		
5,300.0	5,270.0	5,180.8	5,146.4	13.4	13.6	-160.04	299.8	-527.6	1,100.2	1,080.9	19.37	56.796		
5,400.0	5,369.4	5,278.4	5,243.3	13.6	13.9	-160.02	306.2	-537.4	1,121.8	1,102.0	19.74	56.824		
5,500.0	5,468.8	5,376.1	5,340.3	13.9	14.2	-160.00	312.5	-547.3	1,143.3	1,123.2	20.11	56.851		
5,600.0	5,568.2	5,473.7	5,437.2	14.2	14.4	-159.97	318.9	-557.1	1,164.8	1,144.3	20.48	56.877		
5,700.0	5,667.6	5,571.4	5,534.2	14.4	14.7	-159.95	325.2	-567.0	1,186.3	1,165.5	20.85	56.903		
5,800.0	5,766.9	5,669.0	5,631.1	14.7	15.0	-159.93	331.6	-576.9	1,207.8	1,186.6	21.22	56.927		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Chevron D05 696 Pad - Chevron 5-24D - 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							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	-106.82	-4.0	-13.3	13.8					
100.0	100.0	100.0	100.0	0.1	0.1	-106.82	-4.0	-13.3	13.8	13.6	0.29	48.363		
200.0	200.0	200.0	200.0	0.3	0.3	-106.82	-4.0	-13.3	13.8	13.2	0.64	21.790 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	171.78	-4.0	-13.3	15.6	14.6	0.98	15.820 SF		
400.0	399.8	399.4	399.4	0.7	0.7	170.11	-5.6	-13.9	21.8	20.5	1.33	16.361		
500.0	499.5	498.0	497.9	0.9	0.9	165.78	-10.4	-15.8	33.7	32.1	1.69	19.976		
600.0	598.8	595.6	595.0	1.2	1.1	161.76	-18.2	-18.9	50.4	48.3	2.06	24.450		
700.0	698.2	692.0	690.8	1.4	1.3	157.97	-28.9	-23.1	69.8	67.3	2.45	28.493		
800.0	797.6	787.4	785.0	1.7	1.6	154.62	-42.5	-28.5	92.0	89.1	2.85	32.297		
900.0	897.0	884.5	880.7	1.9	1.9	152.10	-57.6	-34.5	115.6	112.3	3.25	35.523		
1,000.0	996.4	981.5	976.4	2.2	2.2	150.44	-72.7	-40.5	139.4	135.7	3.66	38.065		
1,100.0	1,095.8	1,078.6	1,072.1	2.4	2.5	149.27	-87.9	-46.5	163.2	159.1	4.07	40.109		
1,200.0	1,195.2	1,175.7	1,167.8	2.7	2.8	148.39	-103.0	-52.5	187.1	182.6	4.48	41.785		
1,300.0	1,294.6	1,272.7	1,263.5	2.9	3.2	147.71	-118.2	-58.5	211.0	206.1	4.89	43.184		
1,400.0	1,393.9	1,369.8	1,359.2	3.2	3.5	147.17	-133.3	-64.6	235.0	229.7	5.30	44.368		
1,500.0	1,493.3	1,466.9	1,454.9	3.5	3.8	146.73	-148.5	-70.6	258.9	253.2	5.71	45.383		
1,600.0	1,592.7	1,564.0	1,550.6	3.7	4.1	146.37	-163.6	-76.6	282.9	276.8	6.12	46.262		
1,700.0	1,692.1	1,661.0	1,646.3	4.0	4.5	146.06	-178.8	-82.6	306.9	300.4	6.53	47.030		
1,800.0	1,791.5	1,758.1	1,742.0	4.2	4.8	145.80	-193.9	-88.6	330.9	323.9	6.94	47.708		
1,900.0	1,890.9	1,855.2	1,837.7	4.5	5.1	145.57	-209.1	-94.6	354.9	347.5	7.35	48.310		
2,000.0	1,990.3	1,952.2	1,933.4	4.8	5.5	145.37	-224.2	-100.6	378.9	371.1	7.76	48.848		
2,100.0	2,089.6	2,049.3	2,029.0	5.0	5.8	145.19	-239.4	-106.6	402.9	394.7	8.17	49.333		
2,200.0	2,189.0	2,146.4	2,124.7	5.3	6.1	145.04	-254.5	-112.6	426.9	418.3	8.58	49.770		
2,300.0	2,288.4	2,243.4	2,220.4	5.5	6.4	144.90	-269.7	-118.6	450.9	441.9	8.99	50.168		
2,400.0	2,387.8	2,340.5	2,316.1	5.8	6.8	144.77	-284.8	-124.7	474.9	465.5	9.40	50.531		
2,500.0	2,487.2	2,437.6	2,411.8	6.1	7.1	144.66	-300.0	-130.7	498.9	489.1	9.81	50.863		
2,600.0	2,586.6	2,534.7	2,507.5	6.3	7.4	144.56	-315.1	-136.7	522.9	512.7	10.22	51.168		
2,700.0	2,686.0	2,631.7	2,603.2	6.6	7.8	144.46	-330.3	-142.7	546.9	536.3	10.63	51.450		
2,800.0	2,785.3	2,728.8	2,698.9	6.9	8.1	144.38	-345.4	-148.7	570.9	559.9	11.04	51.711		
2,900.0	2,884.7	2,825.9	2,794.6	7.1	8.4	144.30	-360.6	-154.7	595.0	583.5	11.45	51.953		
3,000.0	2,984.1	2,922.9	2,890.3	7.4	8.8	144.23	-375.7	-160.7	619.0	607.1	11.86	52.178		
3,100.0	3,083.5	3,020.0	2,986.0	7.6	9.1	144.16	-390.9	-166.7	643.0	630.7	12.27	52.388		
3,200.0	3,182.9	3,117.1	3,081.7	7.9	9.4	144.10	-406.0	-172.7	667.0	654.3	12.68	52.585		
3,300.0	3,282.3	3,214.1	3,177.3	8.2	9.7	144.04	-421.2	-178.7	691.0	677.9	13.10	52.769		
3,400.0	3,381.7	3,311.2	3,273.0	8.4	10.1	143.98	-436.3	-184.7	715.1	701.6	13.51	52.942		
3,500.0	3,481.1	3,408.3	3,368.7	8.7	10.4	143.93	-451.5	-190.8	739.1	725.2	13.92	53.105		
3,600.0	3,580.4	3,505.4	3,464.4	8.9	10.7	143.89	-466.6	-196.8	763.1	748.8	14.33	53.258		
3,700.0	3,679.8	3,602.4	3,560.1	9.2	11.1	143.84	-481.8	-202.8	787.1	772.4	14.74	53.403		
3,800.0	3,779.2	3,699.5	3,655.8	9.5	11.4	143.80	-496.9	-208.8	811.2	796.0	15.15	53.539		
3,900.0	3,878.6	3,796.6	3,751.5	9.7	11.7	143.76	-512.0	-214.8	835.2	819.6	15.56	53.669		
4,000.0	3,978.0	3,893.6	3,847.2	10.0	12.1	143.72	-527.2	-220.8	859.2	843.2	15.97	53.792		
4,100.0	4,077.4	3,990.7	3,942.9	10.2	12.4	143.69	-542.3	-226.8	883.2	866.8	16.38	53.909		
4,200.0	4,176.8	4,087.8	4,038.6	10.5	12.7	143.65	-557.5	-232.8	907.3	890.5	16.79	54.020		
4,300.0	4,276.1	4,184.8	4,134.3	10.8	13.1	143.62	-572.6	-238.8	931.3	914.1	17.21	54.125		
4,400.0	4,375.5	4,281.9	4,230.0	11.0	13.4	143.59	-587.8	-244.8	955.3	937.7	17.62	54.226		
4,500.0	4,474.9	4,379.0	4,325.7	11.3	13.7	143.56	-602.9	-250.9	979.3	961.3	18.03	54.322		
4,600.0	4,574.3	4,476.0	4,421.3	11.5	14.0	143.54	-618.1	-256.9	1,003.4	984.9	18.44	54.414		
4,700.0	4,673.7	4,573.1	4,517.0	11.8	14.4	143.51	-633.2	-262.9	1,027.4	1,008.5	18.85	54.502		
4,800.0	4,773.1	4,670.2	4,612.7	12.1	14.7	143.49	-648.4	-268.9	1,051.4	1,032.1	19.26	54.586		
4,900.0	4,872.5	4,767.3	4,708.4	12.3	15.0	143.46	-663.5	-274.9	1,075.4	1,055.8	19.67	54.666		
5,000.0	4,971.9	4,864.3	4,804.1	12.6	15.4	143.44	-678.7	-280.9	1,099.5	1,079.4	20.08	54.744		
5,100.0	5,071.2	4,961.4	4,899.8	12.9	15.7	143.42	-693.8	-286.9	1,123.5	1,103.0	20.50	54.818		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Chevron D05 696 Pad - Chevron 5-24D - DD - Plan #2													<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD													<b>Offset Well Error:</b>	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	5,170.6	5,058.5	4,995.5	13.1	16.0	143.40	-709.0	-292.9	1,147.5	1,126.6	20.91	54.889		
5,300.0	5,270.0	5,155.5	5,091.2	13.4	16.4	143.38	-724.1	-298.9	1,171.5	1,150.2	21.32	54.957		
5,400.0	5,369.4	5,252.6	5,186.9	13.6	16.7	143.36	-739.3	-304.9	1,195.6	1,173.8	21.73	55.023		
5,500.0	5,468.8	5,349.7	5,282.6	13.9	17.0	143.34	-754.4	-310.9	1,219.6	1,197.5	22.14	55.087		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-107.56	-8.7	-27.6	29.0					
100.0	100.0	100.0	100.0	0.1	0.1	-107.56	-8.7	-27.6	29.0	28.7	0.29	101.243		
200.0	200.0	200.0	200.0	0.3	0.3	-107.56	-8.7	-27.6	29.0	28.3	0.64	45.615 CC, ES		
300.0	300.0	299.1	299.0	0.5	0.5	168.88	-10.1	-28.7	32.2	31.2	0.98	32.692		
400.0	399.8	397.5	397.3	0.7	0.7	166.49	-14.0	-32.0	41.7	40.4	1.33	31.256 SF		
500.0	499.5	495.0	494.5	0.9	0.9	164.27	-20.4	-37.2	57.6	55.9	1.69	34.113		
600.0	598.8	593.1	592.1	1.2	1.1	163.13	-27.8	-43.3	76.8	74.8	2.05	37.467		
700.0	698.2	691.2	689.8	1.4	1.4	162.46	-35.2	-49.4	96.1	93.6	2.41	39.803		
800.0	797.6	789.4	787.4	1.7	1.6	162.02	-42.6	-55.5	115.3	112.5	2.78	41.513		
900.0	897.0	887.5	885.1	1.9	1.8	161.70	-50.0	-61.6	134.6	131.5	3.14	42.816		
1,000.0	996.4	985.6	982.7	2.2	2.1	161.47	-57.4	-67.6	153.9	150.4	3.51	43.842		
1,100.0	1,095.8	1,083.7	1,080.4	2.4	2.3	161.28	-64.8	-73.7	173.1	169.3	3.88	44.670		
1,200.0	1,195.2	1,181.8	1,178.1	2.7	2.5	161.14	-72.2	-79.8	192.4	188.2	4.24	45.352		
1,300.0	1,294.6	1,280.0	1,275.7	2.9	2.8	161.02	-79.6	-85.9	211.7	207.1	4.61	45.923		
1,400.0	1,393.9	1,378.1	1,373.4	3.2	3.0	160.92	-87.0	-92.0	231.0	226.0	4.98	46.409		
1,500.0	1,493.3	1,476.2	1,471.0	3.5	3.2	160.83	-94.4	-98.0	250.3	244.9	5.34	46.826		
1,600.0	1,592.7	1,574.3	1,568.7	3.7	3.5	160.76	-101.8	-104.1	269.5	263.8	5.71	47.190		
1,700.0	1,692.1	1,672.5	1,666.3	4.0	3.7	160.70	-109.2	-110.2	288.8	282.7	6.08	47.508		
1,800.0	1,791.5	1,770.6	1,764.0	4.2	4.0	160.64	-116.6	-116.3	308.1	301.7	6.45	47.790		
1,900.0	1,890.9	1,868.7	1,861.6	4.5	4.2	160.59	-124.0	-122.4	327.4	320.6	6.81	48.041		
2,000.0	1,990.3	1,966.8	1,959.3	4.8	4.4	160.55	-131.4	-128.5	346.7	339.5	7.18	48.266		
2,100.0	2,089.6	2,065.0	2,057.0	5.0	4.7	160.51	-138.8	-134.5	365.9	358.4	7.55	48.468		
2,200.0	2,189.0	2,163.1	2,154.6	5.3	4.9	160.47	-146.1	-140.6	385.2	377.3	7.92	48.652		
2,300.0	2,288.4	2,261.2	2,252.3	5.5	5.2	160.44	-153.5	-146.7	404.5	396.2	8.29	48.819		
2,400.0	2,387.8	2,359.3	2,349.9	5.8	5.4	160.41	-160.9	-152.8	423.8	415.1	8.65	48.972		
2,500.0	2,487.2	2,457.5	2,447.6	6.1	5.6	160.39	-168.3	-158.9	443.1	434.1	9.02	49.112		
2,600.0	2,586.6	2,555.6	2,545.2	6.3	5.9	160.36	-175.7	-164.9	462.4	453.0	9.39	49.241		
2,700.0	2,686.0	2,653.7	2,642.9	6.6	6.1	160.34	-183.1	-171.0	481.6	471.9	9.76	49.360		
2,800.0	2,785.3	2,751.8	2,740.5	6.9	6.4	160.32	-190.5	-177.1	500.9	490.8	10.13	49.471		
2,900.0	2,884.7	2,849.9	2,838.2	7.1	6.6	160.30	-197.9	-183.2	520.2	509.7	10.49	49.573		
3,000.0	2,984.1	2,948.1	2,935.8	7.4	6.8	160.29	-205.3	-189.3	539.5	528.6	10.86	49.669		
3,100.0	3,083.5	3,046.2	3,033.5	7.6	7.1	160.27	-212.7	-195.3	558.8	547.5	11.23	49.758		
3,200.0	3,182.9	3,144.3	3,131.2	7.9	7.3	160.25	-220.1	-201.4	578.1	566.5	11.60	49.842		
3,300.0	3,282.3	3,242.4	3,228.8	8.2	7.5	160.24	-227.5	-207.5	597.3	585.4	11.97	49.920		
3,400.0	3,381.7	3,340.6	3,326.5	8.4	7.8	160.23	-234.9	-213.6	616.6	604.3	12.33	49.994		
3,500.0	3,481.1	3,438.7	3,424.1	8.7	8.0	160.21	-242.3	-219.7	635.9	623.2	12.70	50.063		
3,600.0	3,580.4	3,536.8	3,521.8	8.9	8.3	160.20	-249.7	-225.7	655.2	642.1	13.07	50.129		
3,700.0	3,679.8	3,634.9	3,619.4	9.2	8.5	160.19	-257.1	-231.8	674.5	661.0	13.44	50.190		
3,800.0	3,779.2	3,733.1	3,717.1	9.5	8.7	160.18	-264.5	-237.9	693.7	679.9	13.81	50.249		
3,900.0	3,878.6	3,831.2	3,814.7	9.7	9.0	160.17	-271.9	-244.0	713.0	698.9	14.17	50.304		
4,000.0	3,978.0	3,929.3	3,912.4	10.0	9.2	160.16	-279.3	-250.1	732.3	717.8	14.54	50.357		
4,100.0	4,077.4	4,027.4	4,010.1	10.2	9.5	160.15	-286.7	-256.1	751.6	736.7	14.91	50.407		
4,200.0	4,176.8	4,125.5	4,107.7	10.5	9.7	160.14	-294.0	-262.2	770.9	755.6	15.28	50.455		
4,300.0	4,276.1	4,223.7	4,205.4	10.8	9.9	160.14	-301.4	-268.3	790.2	774.5	15.65	50.500		
4,400.0	4,375.5	4,321.8	4,303.0	11.0	10.2	160.13	-308.8	-274.4	809.4	793.4	16.01	50.543		
4,500.0	4,474.9	4,419.9	4,400.7	11.3	10.4	160.12	-316.2	-280.5	828.7	812.3	16.38	50.584		
4,600.0	4,574.3	4,518.0	4,498.3	11.5	10.7	160.11	-323.6	-286.5	848.0	831.3	16.75	50.624		
4,700.0	4,673.7	4,616.2	4,596.0	11.8	10.9	160.11	-331.0	-292.6	867.3	850.2	17.12	50.662		
4,800.0	4,773.1	4,714.3	4,693.6	12.1	11.1	160.10	-338.4	-298.7	886.6	869.1	17.49	50.698		
4,900.0	4,872.5	4,812.4	4,791.3	12.3	11.4	160.10	-345.8	-304.8	905.9	888.0	17.86	50.732		
5,000.0	4,971.9	4,910.5	4,888.9	12.6	11.6	160.09	-353.2	-310.9	925.1	906.9	18.22	50.766		
5,100.0	5,071.2	5,008.7	4,986.6	12.9	11.9	160.08	-360.6	-316.9	944.4	925.8	18.59	50.797		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,170.6	5,106.8	5,084.3	13.1	12.1	160.08	-368.0	-323.0	963.7	944.7	18.96	50.828		
5,300.0	5,270.0	5,204.9	5,181.9	13.4	12.3	160.07	-375.4	-329.1	983.0	963.7	19.33	50.858		
5,400.0	5,369.4	5,303.0	5,279.6	13.6	12.6	160.07	-382.8	-335.2	1,002.3	982.6	19.70	50.886		
5,500.0	5,468.8	5,401.1	5,377.2	13.9	12.8	160.06	-390.2	-341.3	1,021.6	1,001.5	20.06	50.913		
5,600.0	5,568.2	5,499.3	5,474.9	14.2	13.1	160.06	-397.6	-347.4	1,040.8	1,020.4	20.43	50.940		
5,700.0	5,667.6	5,597.4	5,572.5	14.4	13.3	160.05	-405.0	-353.4	1,060.1	1,039.3	20.80	50.965		
5,800.0	5,766.9	5,695.5	5,670.2	14.7	13.5	160.05	-412.4	-359.5	1,079.4	1,058.2	21.17	50.990		
5,900.0	5,866.3	5,793.6	5,767.8	14.9	13.8	160.05	-419.8	-365.6	1,098.7	1,077.2	21.54	51.013		
6,000.0	5,965.7	5,891.8	5,865.5	15.2	14.0	160.04	-427.2	-371.7	1,118.0	1,096.1	21.91	51.036		
6,100.0	6,065.1	5,989.9	5,963.2	15.5	14.3	160.04	-434.6	-377.8	1,137.3	1,115.0	22.27	51.058		
6,200.0	6,164.5	6,088.0	6,060.8	15.7	14.5	160.03	-441.9	-383.8	1,156.5	1,133.9	22.64	51.080		
6,300.0	6,263.9	6,186.1	6,158.5	16.0	14.7	160.03	-449.3	-389.9	1,175.8	1,152.8	23.01	51.100		
6,400.0	6,363.3	6,284.3	6,256.1	16.2	15.0	160.03	-456.7	-396.0	1,195.1	1,171.7	23.38	51.120		
6,500.0	6,462.7	6,382.4	6,353.8	16.5	15.2	160.02	-464.1	-402.1	1,214.4	1,190.6	23.75	51.140		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Chevron D05 696 Pad - Chevron 5-27D - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	-107.10	-21.9	-71.0	74.3					
100.0	100.0	100.0	100.0	0.1	0.1	-107.10	-21.9	-71.0	74.3	74.0	0.29	259.688		
200.0	200.0	200.0	200.0	0.3	0.3	-107.10	-21.9	-71.0	74.3	73.7	0.64	117.002 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	170.69	-21.9	-71.0	76.1	75.1	0.98	77.283		
400.0	399.8	399.8	399.8	0.7	0.7	171.27	-21.9	-71.0	81.2	79.9	1.33	60.975		
500.0	499.5	499.5	499.5	0.9	0.8	172.09	-21.9	-71.0	89.8	88.2	1.68	53.525		
600.0	598.8	598.8	598.8	1.2	1.0	172.95	-21.9	-71.0	100.8	98.7	2.03	49.720		
700.0	698.2	698.2	698.2	1.4	1.2	173.64	-21.9	-71.0	111.7	109.4	2.37	47.053		
800.0	797.6	797.6	797.6	1.7	1.4	174.21	-21.9	-71.0	122.7	120.0	2.72	45.077		
900.0	897.0	897.0	897.0	1.9	1.5	174.69	-21.9	-71.0	133.8	130.7	3.07	43.554		
1,000.0	996.4	996.4	996.4	2.2	1.7	175.10	-21.9	-71.0	144.8	141.3	3.42	42.346		
1,100.0	1,095.8	1,091.4	1,091.4	2.4	1.9	175.69	-21.4	-72.4	157.1	153.4	3.76	41.807 SF		
1,200.0	1,195.2	1,185.4	1,185.3	2.7	2.0	176.68	-20.2	-76.8	172.4	168.3	4.10	42.086		
1,300.0	1,294.6	1,280.0	1,279.6	2.9	2.2	177.92	-18.0	-84.0	190.5	186.0	4.44	42.936		
1,400.0	1,393.9	1,378.2	1,377.4	3.2	2.4	179.08	-15.6	-92.2	209.3	204.5	4.78	43.761		
1,500.0	1,493.3	1,476.3	1,475.1	3.5	2.6	-179.95	-13.2	-100.4	228.3	223.1	5.13	44.480		
1,600.0	1,592.7	1,574.4	1,572.9	3.7	2.8	-179.13	-10.7	-108.6	247.2	241.7	5.48	45.112		
1,700.0	1,692.1	1,672.6	1,670.6	4.0	3.0	-178.43	-8.3	-116.9	266.2	260.4	5.83	45.671		
1,800.0	1,791.5	1,770.7	1,768.4	4.2	3.2	-177.82	-5.9	-125.1	285.3	279.1	6.18	46.169		
1,900.0	1,890.9	1,868.8	1,866.1	4.5	3.4	-177.29	-3.5	-133.3	304.4	297.8	6.53	46.617		
2,000.0	1,990.3	1,966.9	1,963.9	4.8	3.7	-176.82	-1.0	-141.5	323.5	316.6	6.88	47.021		
2,100.0	2,089.6	2,065.1	2,061.6	5.0	3.9	-176.40	1.4	-149.7	342.6	335.4	7.23	47.387		
2,200.0	2,189.0	2,163.2	2,159.4	5.3	4.1	-176.02	3.8	-157.9	361.7	354.2	7.58	47.721		
2,300.0	2,288.4	2,261.3	2,257.1	5.5	4.3	-175.69	6.3	-166.1	380.9	372.9	7.93	48.026		
2,400.0	2,387.8	2,359.4	2,354.9	5.8	4.5	-175.38	8.7	-174.3	400.0	391.8	8.28	48.307		
2,500.0	2,487.2	2,457.6	2,452.6	6.1	4.7	-175.11	11.1	-182.5	419.2	410.6	8.63	48.565		
2,600.0	2,586.6	2,555.7	2,550.4	6.3	5.0	-174.86	13.5	-190.8	438.4	429.4	8.98	48.804		
2,700.0	2,686.0	2,653.8	2,648.1	6.6	5.2	-174.63	16.0	-199.0	457.6	448.2	9.33	49.025		
2,800.0	2,785.3	2,751.9	2,745.9	6.9	5.4	-174.41	18.4	-207.2	476.8	467.1	9.68	49.231		
2,900.0	2,884.7	2,850.1	2,843.6	7.1	5.6	-174.22	20.8	-215.4	496.0	485.9	10.04	49.423		
3,000.0	2,984.1	2,948.2	2,941.4	7.4	5.9	-174.04	23.3	-223.6	515.2	504.8	10.39	49.603		
3,100.0	3,083.5	3,046.3	3,039.1	7.6	6.1	-173.87	25.7	-231.8	534.4	523.6	10.74	49.770		
3,200.0	3,182.9	3,144.4	3,136.9	7.9	6.3	-173.71	28.1	-240.0	553.6	542.5	11.09	49.928		
3,300.0	3,282.3	3,242.6	3,234.7	8.2	6.5	-173.57	30.5	-248.2	572.8	561.4	11.44	50.076		
3,400.0	3,381.7	3,340.7	3,332.4	8.4	6.8	-173.43	33.0	-256.4	592.0	580.2	11.79	50.216		
3,500.0	3,481.1	3,438.8	3,430.2	8.7	7.0	-173.30	35.4	-264.7	611.2	599.1	12.14	50.347		
3,600.0	3,580.4	3,536.9	3,527.9	8.9	7.2	-173.18	37.8	-272.9	630.5	618.0	12.49	50.472		
3,700.0	3,679.8	3,635.1	3,625.7	9.2	7.4	-173.07	40.3	-281.1	649.7	636.9	12.84	50.589		
3,800.0	3,779.2	3,733.2	3,723.4	9.5	7.6	-172.96	42.7	-289.3	668.9	655.7	13.19	50.701		
3,900.0	3,878.6	3,831.3	3,821.2	9.7	7.9	-172.86	45.1	-297.5	688.2	674.6	13.54	50.807		
4,000.0	3,978.0	3,929.5	3,918.9	10.0	8.1	-172.77	47.5	-305.7	707.4	693.5	13.90	50.908		
4,100.0	4,077.4	4,027.6	4,016.7	10.2	8.3	-172.67	50.0	-313.9	726.6	712.4	14.25	51.004		
4,200.0	4,176.8	4,125.7	4,114.4	10.5	8.5	-172.59	52.4	-322.1	745.9	731.3	14.60	51.095		
4,300.0	4,276.1	4,223.8	4,212.2	10.8	8.8	-172.51	54.8	-330.3	765.1	750.2	14.95	51.182		
4,400.0	4,375.5	4,322.0	4,309.9	11.0	9.0	-172.43	57.3	-338.6	784.3	769.0	15.30	51.265		
4,500.0	4,474.9	4,420.1	4,407.7	11.3	9.2	-172.36	59.7	-346.8	803.6	787.9	15.65	51.345		
4,600.0	4,574.3	4,518.2	4,505.4	11.5	9.4	-172.29	62.1	-355.0	822.8	806.8	16.00	51.421		
4,700.0	4,673.7	4,616.3	4,603.2	11.8	9.7	-172.22	64.5	-363.2	842.1	825.7	16.35	51.494		
4,800.0	4,773.1	4,714.5	4,700.9	12.1	9.9	-172.16	67.0	-371.4	861.3	844.6	16.70	51.564		
4,900.0	4,872.5	4,812.6	4,798.7	12.3	10.1	-172.10	69.4	-379.6	880.6	863.5	17.06	51.631		
5,000.0	4,971.9	4,910.7	4,896.4	12.6	10.4	-172.04	71.8	-387.8	899.8	882.4	17.41	51.695		
5,100.0	5,071.2	5,008.8	4,994.2	12.9	10.6	-171.98	74.3	-396.0	919.1	901.3	17.76	51.757		

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



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Chevron D05 696 Pad - Chevron 5-27D - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						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	5,170.6	5,107.0	5,091.9	13.1	10.8	-171.93	76.7	-404.2	938.3	920.2	18.11	51.816		
5,300.0	5,270.0	5,205.1	5,189.7	13.4	11.0	-171.88	79.1	-412.5	957.6	939.1	18.46	51.874		
5,400.0	5,369.4	5,303.2	5,287.4	13.6	11.3	-171.83	81.5	-420.7	976.8	958.0	18.81	51.929		
5,500.0	5,468.8	5,401.3	5,385.2	13.9	11.5	-171.78	84.0	-428.9	996.1	976.9	19.16	51.982		
5,600.0	5,568.2	5,499.5	5,482.9	14.2	11.7	-171.73	86.4	-437.1	1,015.3	995.8	19.51	52.033		
5,700.0	5,667.6	5,597.6	5,580.7	14.4	11.9	-171.69	88.8	-445.3	1,034.6	1,014.7	19.86	52.083		
5,800.0	5,766.9	5,695.7	5,678.5	14.7	12.2	-171.65	91.2	-453.5	1,053.8	1,033.6	20.21	52.131		
5,900.0	5,866.3	5,793.9	5,776.2	14.9	12.4	-171.61	93.7	-461.7	1,073.1	1,052.5	20.57	52.177		
6,000.0	5,965.7	5,892.0	5,874.0	15.2	12.6	-171.57	96.1	-469.9	1,092.3	1,071.4	20.92	52.221		
6,100.0	6,065.1	5,990.1	5,971.7	15.5	12.8	-171.53	98.5	-478.1	1,111.6	1,090.3	21.27	52.265		
6,200.0	6,164.5	6,088.2	6,069.5	15.7	13.1	-171.49	101.0	-486.4	1,130.8	1,109.2	21.62	52.306		
6,300.0	6,263.9	6,186.4	6,167.2	16.0	13.3	-171.46	103.4	-494.6	1,150.1	1,128.1	21.97	52.347		
6,400.0	6,363.3	6,294.2	6,274.7	16.2	13.5	-171.42	106.0	-503.5	1,169.3	1,146.9	22.34	52.344		
6,500.0	6,462.7	6,457.7	6,437.9	16.5	13.8	-171.44	108.4	-511.4	1,185.0	1,162.2	22.80	51.980		
6,600.0	6,562.0	6,579.2	6,559.4	16.8	14.0	-171.53	108.5	-512.1	1,196.4	1,173.2	23.18	51.611		
6,700.0	6,661.4	6,674.2	6,654.4	17.0	14.1	-171.62	108.3	-512.4	1,207.7	1,184.2	23.52	51.352		
6,800.0	6,760.8	6,769.8	6,750.0	17.3	14.3	-171.71	107.9	-513.2	1,219.4	1,195.6	23.86	51.114		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Chevron D05 696 Pad - Chevron 5-28D - DD - Plan #4													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							
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	-107.15	-17.5	-56.7	59.3					
100.0	100.0	100.0	100.0	0.1	0.2	-107.15	-17.5	-56.7	59.3	59.0	0.29	202.253		
200.0	200.0	200.0	200.0	0.3	0.3	-107.15	-17.5	-56.7	59.3	58.7	0.64	92.333 CC, ES		
300.0	300.0	299.7	299.7	0.5	0.5	169.08	-19.2	-56.4	61.3	60.3	0.99	61.616		
400.0	399.8	399.0	398.9	0.7	0.7	165.52	-24.3	-55.5	67.3	65.9	1.36	49.423		
500.0	499.5	496.6	496.3	0.9	0.9	162.97	-30.4	-55.8	78.4	76.7	1.72	45.571		
600.0	598.8	593.4	592.9	1.2	1.1	163.07	-35.1	-59.1	94.1	92.0	2.07	45.425 SF		
700.0	698.2	689.6	688.8	1.4	1.3	164.40	-38.5	-65.4	112.1	109.7	2.41	46.465		
800.0	797.6	787.8	786.6	1.7	1.5	165.82	-41.5	-73.1	131.1	128.3	2.76	47.551		
900.0	897.0	885.9	884.4	1.9	1.7	166.88	-44.5	-80.8	150.1	147.0	3.10	48.406		
1,000.0	996.4	984.0	982.2	2.2	1.9	167.69	-47.5	-88.4	169.2	165.8	3.45	49.096		
1,100.0	1,095.8	1,082.2	1,080.0	2.4	2.1	168.35	-50.4	-96.1	188.3	184.5	3.79	49.663		
1,200.0	1,195.2	1,180.3	1,177.8	2.7	2.3	168.88	-53.4	-103.8	207.5	203.3	4.14	50.139		
1,300.0	1,294.6	1,278.5	1,275.6	2.9	2.5	169.32	-56.4	-111.5	226.6	222.1	4.48	50.543		
1,400.0	1,393.9	1,376.6	1,373.4	3.2	2.8	169.70	-59.4	-119.1	245.8	241.0	4.83	50.891		
1,500.0	1,493.3	1,474.7	1,471.1	3.5	3.0	170.02	-62.3	-126.8	265.0	259.8	5.18	51.193		
1,600.0	1,592.7	1,572.9	1,568.9	3.7	3.2	170.29	-65.3	-134.5	284.1	278.6	5.52	51.458		
1,700.0	1,692.1	1,671.0	1,666.7	4.0	3.4	170.53	-68.3	-142.2	303.3	297.5	5.87	51.693		
1,800.0	1,791.5	1,769.1	1,764.5	4.2	3.6	170.75	-71.3	-149.8	322.5	316.3	6.21	51.902		
1,900.0	1,890.9	1,867.3	1,862.3	4.5	3.9	170.93	-74.2	-157.5	341.7	335.1	6.56	52.089		
2,000.0	1,990.3	1,965.4	1,960.1	4.8	4.1	171.10	-77.2	-165.2	360.9	354.0	6.91	52.258		
2,100.0	2,089.6	2,063.5	2,057.9	5.0	4.3	171.26	-80.2	-172.9	380.1	372.8	7.25	52.411		
2,200.0	2,189.0	2,161.7	2,155.7	5.3	4.5	171.39	-83.2	-180.5	399.3	391.7	7.60	52.550		
2,300.0	2,288.4	2,259.8	2,253.5	5.5	4.7	171.52	-86.1	-188.2	418.5	410.6	7.94	52.678		
2,400.0	2,387.8	2,357.9	2,351.3	5.8	5.0	171.63	-89.1	-195.9	437.7	429.4	8.29	52.795		
2,500.0	2,487.2	2,456.1	2,449.0	6.1	5.2	171.73	-92.1	-203.6	456.9	448.3	8.64	52.902		
2,600.0	2,586.6	2,554.2	2,546.8	6.3	5.4	171.83	-95.1	-211.2	476.1	467.1	8.98	53.002		
2,700.0	2,686.0	2,652.3	2,644.6	6.6	5.6	171.92	-98.0	-218.9	495.3	486.0	9.33	53.094		
2,800.0	2,785.3	2,750.5	2,742.4	6.9	5.9	172.00	-101.0	-226.6	514.5	504.9	9.68	53.179		
2,900.0	2,884.7	2,848.6	2,840.2	7.1	6.1	172.08	-104.0	-234.2	533.8	523.7	10.02	53.259		
3,000.0	2,984.1	2,946.7	2,938.0	7.4	6.3	172.15	-107.0	-241.9	553.0	542.6	10.37	53.334		
3,100.0	3,083.5	3,044.9	3,035.8	7.6	6.5	172.21	-109.9	-249.6	572.2	561.5	10.71	53.403		
3,200.0	3,182.9	3,143.0	3,133.6	7.9	6.7	172.27	-112.9	-257.3	591.4	580.3	11.06	53.469		
3,300.0	3,282.3	3,241.1	3,231.4	8.2	7.0	172.33	-115.9	-264.9	610.6	599.2	11.41	53.530		
3,400.0	3,381.7	3,339.3	3,329.1	8.4	7.2	172.39	-118.9	-272.6	629.8	618.1	11.75	53.588		
3,500.0	3,481.1	3,437.4	3,426.9	8.7	7.4	172.44	-121.8	-280.3	649.0	636.9	12.10	53.643		
3,600.0	3,580.4	3,535.6	3,524.7	8.9	7.6	172.48	-124.8	-288.0	668.3	655.8	12.45	53.694		
3,700.0	3,679.8	3,633.7	3,622.5	9.2	7.9	172.53	-127.8	-295.6	687.5	674.7	12.79	53.743		
3,800.0	3,779.2	3,731.8	3,720.3	9.5	8.1	172.57	-130.8	-303.3	706.7	693.5	13.14	53.789		
3,900.0	3,878.6	3,830.0	3,818.1	9.7	8.3	172.61	-133.8	-311.0	725.9	712.4	13.48	53.833		
4,000.0	3,978.0	3,928.1	3,915.9	10.0	8.5	172.65	-136.7	-318.7	745.1	731.3	13.83	53.875		
4,100.0	4,077.4	4,026.2	4,013.7	10.2	8.8	172.69	-139.7	-326.3	764.3	750.2	14.18	53.915		
4,200.0	4,176.8	4,124.4	4,111.5	10.5	9.0	172.72	-142.7	-334.0	783.6	769.0	14.52	53.952		
4,300.0	4,276.1	4,222.5	4,209.2	10.8	9.2	172.76	-145.7	-341.7	802.8	787.9	14.87	53.988		
4,400.0	4,375.5	4,320.6	4,307.0	11.0	9.4	172.79	-148.6	-349.4	822.0	806.8	15.22	54.023		
4,500.0	4,474.9	4,418.8	4,404.8	11.3	9.6	172.82	-151.6	-357.0	841.2	825.6	15.56	54.056		
4,600.0	4,574.3	4,516.9	4,502.6	11.5	9.9	172.85	-154.6	-364.7	860.4	844.5	15.91	54.087		
4,700.0	4,673.7	4,615.0	4,600.4	11.8	10.1	172.87	-157.6	-372.4	879.6	863.4	16.25	54.117		
4,800.0	4,773.1	4,713.2	4,698.2	12.1	10.3	172.90	-160.5	-380.1	898.9	882.3	16.60	54.146		
4,900.0	4,872.5	4,811.3	4,796.0	12.3	10.5	172.93	-163.5	-387.7	918.1	901.1	16.95	54.174		
5,000.0	4,971.9	4,909.4	4,893.8	12.6	10.8	172.95	-166.5	-395.4	937.3	920.0	17.29	54.201		
5,100.0	5,071.2	5,007.6	4,991.6	12.9	11.0	172.97	-169.5	-403.1	956.5	938.9	17.64	54.226		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Chevron D05 696 Pad - Chevron 5-28D - DD - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						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	5,170.6	5,105.7	5,089.3	13.1	11.2	173.00	-172.4	-410.8	975.7	957.8	17.99	54.251		
5,300.0	5,270.0	5,203.8	5,187.1	13.4	11.4	173.02	-175.4	-418.4	995.0	976.6	18.33	54.275		
5,400.0	5,369.4	5,302.0	5,284.9	13.6	11.7	173.04	-178.4	-426.1	1,014.2	995.5	18.68	54.297		
5,500.0	5,468.8	5,400.1	5,382.7	13.9	11.9	173.06	-181.4	-433.8	1,033.4	1,014.4	19.02	54.319		
5,600.0	5,568.2	5,498.3	5,480.5	14.2	12.1	173.08	-184.3	-441.5	1,052.6	1,033.3	19.37	54.341		
5,700.0	5,667.6	5,596.4	5,578.3	14.4	12.3	173.09	-187.3	-449.1	1,071.8	1,052.1	19.72	54.361		
5,800.0	5,766.9	5,694.5	5,676.1	14.7	12.6	173.11	-190.3	-456.8	1,091.1	1,071.0	20.06	54.381		
5,900.0	5,866.3	5,792.7	5,773.9	14.9	12.8	173.13	-193.3	-464.5	1,110.3	1,089.9	20.41	54.400		
6,000.0	5,965.7	5,890.8	5,871.7	15.2	13.0	173.15	-196.2	-472.2	1,129.5	1,108.8	20.76	54.418		
6,100.0	6,065.1	5,988.9	5,969.5	15.5	13.2	173.16	-199.2	-479.8	1,148.7	1,127.6	21.10	54.436		
6,200.0	6,164.5	6,087.1	6,067.2	15.7	13.4	173.18	-202.2	-487.5	1,167.9	1,146.5	21.45	54.454		
6,300.0	6,263.9	6,185.2	6,165.0	16.0	13.7	173.19	-205.2	-495.2	1,187.2	1,165.4	21.79	54.470		
6,400.0	6,363.3	6,285.6	6,265.0	16.2	13.9	173.21	-208.2	-503.0	1,206.4	1,184.2	22.14	54.477		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	Berry Petroleum Company (NAD 83)	<b>Local Co-ordinate Reference:</b>	Well Chevron 5-16D
<b>Project:</b>	Garfield County	<b>TVD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Reference Site:</b>	Chevron D05 696 Pad	<b>MD Reference:</b>	KBE @ 8160.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Chevron 5-16D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KBE @ 8160.0ft (Original Well Elev)  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Chevron 5-16D  
Coordinate System is US State Plane 1983, Colorado Central Zone  
Grid Convergence at Surface is: -1.66°

