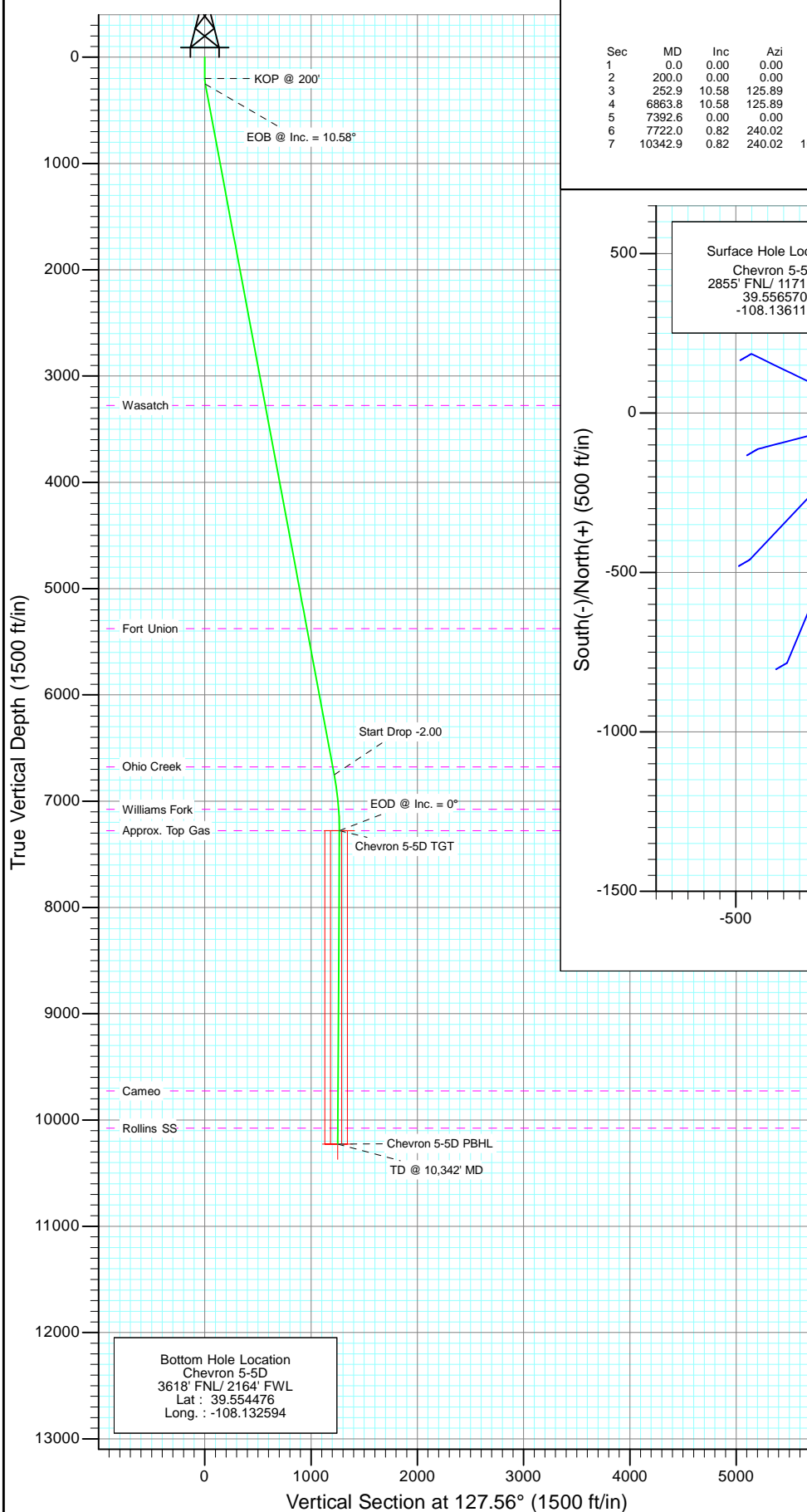
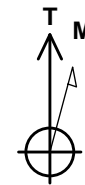
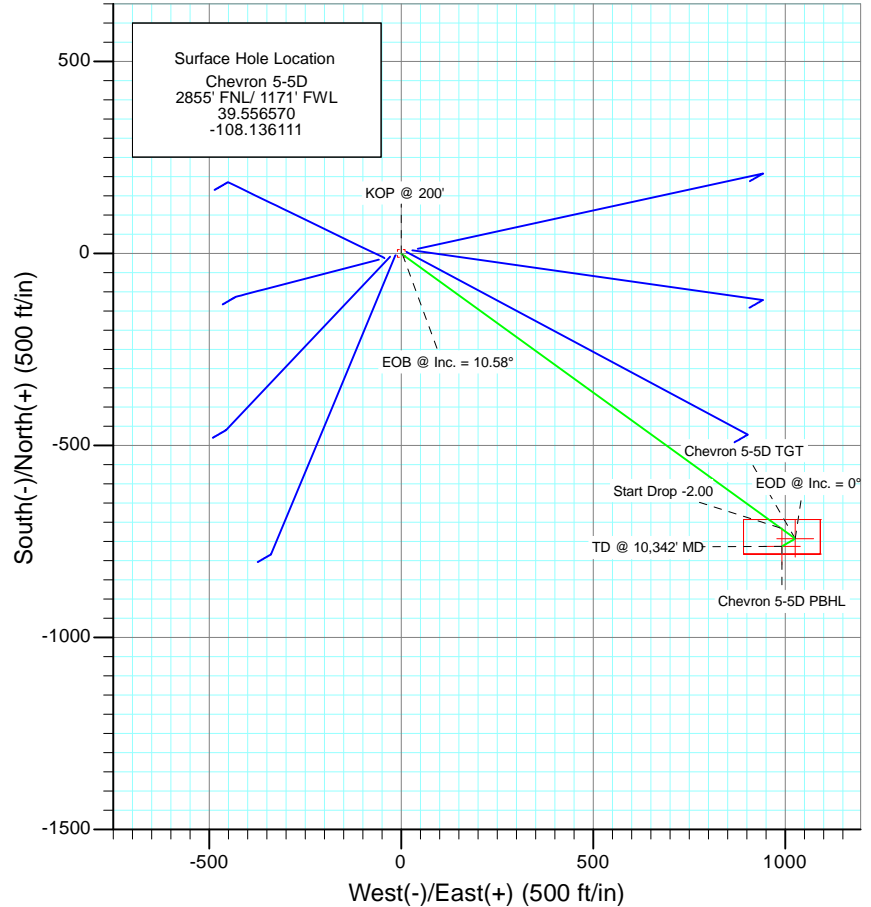




Project: Garfield County
Site: Chevron E05 696
Well: Chevron 5-5D
Wellbore: DD
Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect	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	252.9	10.58	125.89	252.6	-2.9	3.9	20.00	125.89	4.9	
4	6863.8	10.58	125.89	6751.2	-714.2	986.9	0.00	0.00	1217.7	
5	7392.6	0.00	0.00	7277.0	-742.7	1026.3	2.00	180.00	1266.3	Chevron 5-5D TGT
6	7722.0	0.82	240.02	7606.3	-743.9	1024.3	0.25	240.02	1265.4	
7	10342.9	0.82	240.02	10227.0	-762.7	991.7	0.00	0.00	1251.1	Chevron 5-5D PBHL



Azimuths to True North
Magnetic North: 10.48°

Magnetic Field
Strength: 52289.6snT
Dip Angle: 65.77°
Date: 1/13/2011
Model: IGRF2010

FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
3277.0	3329.6	Wasatch
5377.0	5465.9	Fort Union
6677.0	6788.3	Ohio Creek
7077.0	7192.4	Williams Fork
7277.0	7392.6	Approx. Top Gas
9727.0	9842.8	Cameo
10077.0	10192.9	Rollins SS

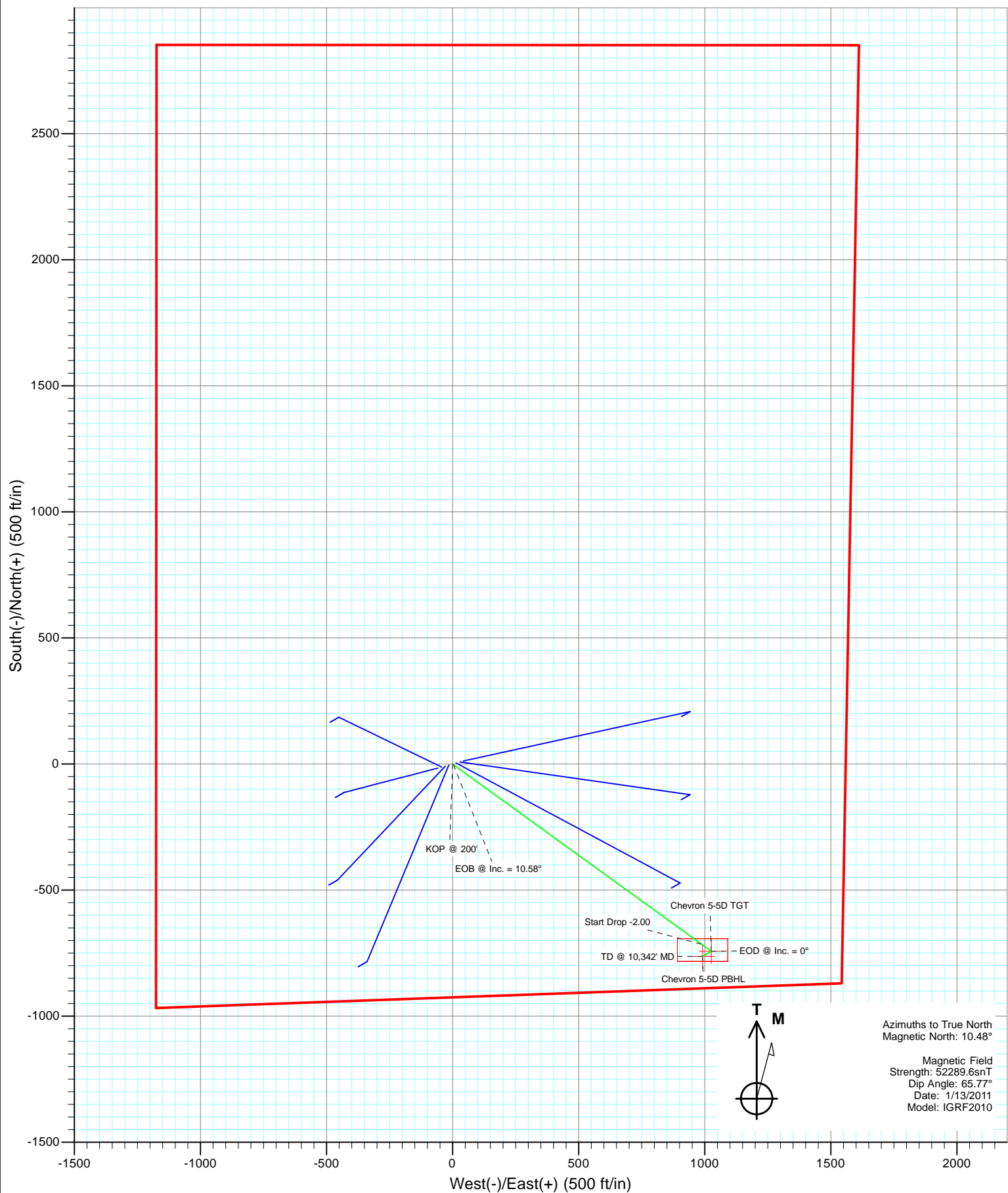
DESIGN DETAILS: Plan #1

WELL @ 8144.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From	TVD
No Target (Freehand)	127.56	Slot	0.0	0.0		0.0



Project: Garfield County
Site: Chevron E05 696
Well: Chevron 5-5D
Wellbore: DD
Design: Pad Layout



Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-5D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-5D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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		Chevron E05 696			
Site Position:		Northing:	1,638,406.53 ft	Latitude:	39.556604
From:	Lat/Long	Easting:	2,256,881.00 ft	Longitude:	-108.135957
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.66 °

Well	Chevron 5-5D					
Well Position	+N/-S	0.0 ft	Northing:	1,638,395.41 ft	Latitude:	39.556570
	+E/-W	0.0 ft	Easting:	2,256,837.23 ft	Longitude:	-108.136111
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,124.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/13/2011	10.48	65.77	52,290

Design	Plan #1				
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	127.56	

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	
252.9	10.58	125.89	252.6	-2.9	3.9	20.00	20.00	0.00	125.89	
6,863.8	10.58	125.89	6,751.2	-714.2	986.9	0.00	0.00	0.00	0.00	
7,392.6	0.00	0.00	7,277.0	-742.7	1,026.3	2.00	-2.00	0.00	180.00	Chevron 5-5D TGT
7,722.0	0.82	240.02	7,606.3	-743.9	1,024.3	0.25	0.25	-36.43	240.02	
10,342.9	0.82	240.02	10,227.0	-762.7	991.7	0.00	0.00	0.00	0.00	Chevron 5-5D PBHL

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-5D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-5D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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'
210.0	2.00	125.89	210.0	-0.1	0.1	0.2	20.00	20.00	
240.0	8.00	125.89	239.9	-1.6	2.3	2.8	20.00	20.00	
252.9	10.58	125.89	252.6	-2.9	3.9	4.9	20.00	20.00	EOB @ Inc. = 10.58°
270.0	10.58	125.89	269.4	-4.7	6.5	8.0	0.00	0.00	
300.0	10.58	125.89	298.9	-7.9	10.9	13.5	0.00	0.00	
330.0	10.58	125.89	328.4	-11.2	15.4	19.0	0.00	0.00	
360.0	10.58	125.89	357.9	-14.4	19.9	24.5	0.00	0.00	
390.0	10.58	125.89	387.4	-17.6	24.3	30.0	0.00	0.00	
420.0	10.58	125.89	416.9	-20.8	28.8	35.5	0.00	0.00	
450.0	10.58	125.89	446.4	-24.1	33.3	41.0	0.00	0.00	
480.0	10.58	125.89	475.8	-27.3	37.7	46.5	0.00	0.00	
510.0	10.58	125.89	505.3	-30.5	42.2	52.0	0.00	0.00	
540.0	10.58	125.89	534.8	-33.7	46.6	57.5	0.00	0.00	
570.0	10.58	125.89	564.3	-37.0	51.1	63.0	0.00	0.00	
600.0	10.58	125.89	593.8	-40.2	55.6	68.5	0.00	0.00	
630.0	10.58	125.89	623.3	-43.4	60.0	74.1	0.00	0.00	
660.0	10.58	125.89	652.8	-46.7	64.5	79.6	0.00	0.00	
690.0	10.58	125.89	682.3	-49.9	68.9	85.1	0.00	0.00	
720.0	10.58	125.89	711.8	-53.1	73.4	90.6	0.00	0.00	
750.0	10.58	125.89	741.3	-56.3	77.9	96.1	0.00	0.00	
780.0	10.58	125.89	770.7	-59.6	82.3	101.6	0.00	0.00	
810.0	10.58	125.89	800.2	-62.8	86.8	107.1	0.00	0.00	
840.0	10.58	125.89	829.7	-66.0	91.2	112.6	0.00	0.00	
870.0	10.58	125.89	859.2	-69.3	95.7	118.1	0.00	0.00	
900.0	10.58	125.89	888.7	-72.5	100.2	123.6	0.00	0.00	
930.0	10.58	125.89	918.2	-75.7	104.6	129.1	0.00	0.00	
960.0	10.58	125.89	947.7	-78.9	109.1	134.6	0.00	0.00	
990.0	10.58	125.89	977.2	-82.2	113.5	140.1	0.00	0.00	
1,020.0	10.58	125.89	1,006.7	-85.4	118.0	145.6	0.00	0.00	
1,050.0	10.58	125.89	1,036.2	-88.6	122.5	151.1	0.00	0.00	
1,080.0	10.58	125.89	1,065.6	-91.8	126.9	156.6	0.00	0.00	
1,110.0	10.58	125.89	1,095.1	-95.1	131.4	162.1	0.00	0.00	
1,140.0	10.58	125.89	1,124.6	-98.3	135.8	167.6	0.00	0.00	
1,170.0	10.58	125.89	1,154.1	-101.5	140.3	173.1	0.00	0.00	
1,200.0	10.58	125.89	1,183.6	-104.8	144.8	178.6	0.00	0.00	
1,230.0	10.58	125.89	1,213.1	-108.0	149.2	184.1	0.00	0.00	
1,260.0	10.58	125.89	1,242.6	-111.2	153.7	189.6	0.00	0.00	
1,290.0	10.58	125.89	1,272.1	-114.4	158.2	195.1	0.00	0.00	
1,320.0	10.58	125.89	1,301.6	-117.7	162.6	200.6	0.00	0.00	
1,350.0	10.58	125.89	1,331.1	-120.9	167.1	206.1	0.00	0.00	
1,380.0	10.58	125.89	1,360.6	-124.1	171.5	211.6	0.00	0.00	
1,410.0	10.58	125.89	1,390.0	-127.4	176.0	217.1	0.00	0.00	
1,440.0	10.58	125.89	1,419.5	-130.6	180.5	222.7	0.00	0.00	
1,470.0	10.58	125.89	1,449.0	-133.8	184.9	228.2	0.00	0.00	

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-5D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-5D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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	10.58	125.89	1,478.5	-137.0	189.4	233.7	0.00	0.00	
1,530.0	10.58	125.89	1,508.0	-140.3	193.8	239.2	0.00	0.00	
1,560.0	10.58	125.89	1,537.5	-143.5	198.3	244.7	0.00	0.00	
1,590.0	10.58	125.89	1,567.0	-146.7	202.8	250.2	0.00	0.00	
1,620.0	10.58	125.89	1,596.5	-150.0	207.2	255.7	0.00	0.00	
1,650.0	10.58	125.89	1,626.0	-153.2	211.7	261.2	0.00	0.00	
1,680.0	10.58	125.89	1,655.5	-156.4	216.1	266.7	0.00	0.00	
1,710.0	10.58	125.89	1,684.9	-159.6	220.6	272.2	0.00	0.00	
1,740.0	10.58	125.89	1,714.4	-162.9	225.1	277.7	0.00	0.00	
1,770.0	10.58	125.89	1,743.9	-166.1	229.5	283.2	0.00	0.00	
1,800.0	10.58	125.89	1,773.4	-169.3	234.0	288.7	0.00	0.00	
1,830.0	10.58	125.89	1,802.9	-172.5	238.4	294.2	0.00	0.00	
1,860.0	10.58	125.89	1,832.4	-175.8	242.9	299.7	0.00	0.00	
1,890.0	10.58	125.89	1,861.9	-179.0	247.4	305.2	0.00	0.00	
1,920.0	10.58	125.89	1,891.4	-182.2	251.8	310.7	0.00	0.00	
1,950.0	10.58	125.89	1,920.9	-185.5	256.3	316.2	0.00	0.00	
1,980.0	10.58	125.89	1,950.4	-188.7	260.7	321.7	0.00	0.00	
2,010.0	10.58	125.89	1,979.9	-191.9	265.2	327.2	0.00	0.00	
2,040.0	10.58	125.89	2,009.3	-195.1	269.7	332.7	0.00	0.00	
2,070.0	10.58	125.89	2,038.8	-198.4	274.1	338.2	0.00	0.00	
2,100.0	10.58	125.89	2,068.3	-201.6	278.6	343.7	0.00	0.00	
2,130.0	10.58	125.89	2,097.8	-204.8	283.1	349.2	0.00	0.00	
2,160.0	10.58	125.89	2,127.3	-208.1	287.5	354.7	0.00	0.00	
2,190.0	10.58	125.89	2,156.8	-211.3	292.0	360.2	0.00	0.00	
2,220.0	10.58	125.89	2,186.3	-214.5	296.4	365.8	0.00	0.00	
2,250.0	10.58	125.89	2,215.8	-217.7	300.9	371.3	0.00	0.00	
2,280.0	10.58	125.89	2,245.3	-221.0	305.4	376.8	0.00	0.00	
2,310.0	10.58	125.89	2,274.8	-224.2	309.8	382.3	0.00	0.00	
2,340.0	10.58	125.89	2,304.2	-227.4	314.3	387.8	0.00	0.00	
2,370.0	10.58	125.89	2,333.7	-230.6	318.7	393.3	0.00	0.00	
2,400.0	10.58	125.89	2,363.2	-233.9	323.2	398.8	0.00	0.00	
2,430.0	10.58	125.89	2,392.7	-237.1	327.7	404.3	0.00	0.00	
2,460.0	10.58	125.89	2,422.2	-240.3	332.1	409.8	0.00	0.00	
2,490.0	10.58	125.89	2,451.7	-243.6	336.6	415.3	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 5-5D TGT	0.00	0.00	7,277.0	-742.7	1,026.3	1,637,623.24	2,257,841.60	39.554531	-108.132471
- plan misses target center by 4899.8ft at 2490.0ft MD (2451.7 TVD, -243.6 N, 336.6 E)									
- Point									
Chevron 5-5D PBHL	0.00	0.00	10,227.0	-762.7	991.7	1,637,604.25	2,257,806.36	39.554476	-108.132594
- plan misses target center by 7820.1ft at 2490.0ft MD (2451.7 TVD, -243.6 N, 336.6 E)									
- Polygon									
Point 1			10,227.0	70.0	-100.0	1,637,677.12	2,257,708.44		
Point 2			10,227.0	70.0	100.0	1,637,671.32	2,257,908.35		
Point 3			10,227.0	-20.0	100.0	1,637,581.36	2,257,905.74		
Point 4			10,227.0	-20.0	-100.0	1,637,587.16	2,257,705.83		

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-5D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-5D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
2,500.0	10.58	125.89	2,461.5	-244.6	338.1	417.1	0.00	0.00	
2,600.0	10.58	125.89	2,559.8	-255.4	352.9	435.5	0.00	0.00	
2,700.0	10.58	125.89	2,658.1	-266.2	367.8	453.8	0.00	0.00	
2,800.0	10.58	125.89	2,756.4	-276.9	382.7	472.2	0.00	0.00	
2,900.0	10.58	125.89	2,854.7	-287.7	397.5	490.5	0.00	0.00	
3,000.0	10.58	125.89	2,953.0	-298.4	412.4	508.8	0.00	0.00	
3,100.0	10.58	125.89	3,051.3	-309.2	427.3	527.2	0.00	0.00	
3,200.0	10.58	125.89	3,149.6	-320.0	442.2	545.5	0.00	0.00	
3,300.0	10.58	125.89	3,247.9	-330.7	457.0	563.9	0.00	0.00	
3,329.6	10.58	125.89	3,277.0	-333.9	461.4	569.3	0.00	0.00	Wasatch
3,400.0	10.58	125.89	3,346.2	-341.5	471.9	582.2	0.00	0.00	
3,500.0	10.58	125.89	3,444.5	-352.2	486.8	600.6	0.00	0.00	
3,600.0	10.58	125.89	3,542.8	-363.0	501.6	618.9	0.00	0.00	
3,700.0	10.58	125.89	3,641.1	-373.8	516.5	637.3	0.00	0.00	
3,800.0	10.58	125.89	3,739.4	-384.5	531.4	655.6	0.00	0.00	
3,900.0	10.58	125.89	3,837.7	-395.3	546.2	674.0	0.00	0.00	
4,000.0	10.58	125.89	3,936.0	-406.0	561.1	692.3	0.00	0.00	
4,100.0	10.58	125.89	4,034.3	-416.8	576.0	710.7	0.00	0.00	
4,200.0	10.58	125.89	4,132.6	-427.6	590.8	729.0	0.00	0.00	
4,300.0	10.58	125.89	4,231.0	-438.3	605.7	747.3	0.00	0.00	
4,400.0	10.58	125.89	4,329.3	-449.1	620.6	765.7	0.00	0.00	
4,500.0	10.58	125.89	4,427.6	-459.8	635.4	784.0	0.00	0.00	
4,600.0	10.58	125.89	4,525.9	-470.6	650.3	802.4	0.00	0.00	
4,700.0	10.58	125.89	4,624.2	-481.4	665.2	820.7	0.00	0.00	
4,800.0	10.58	125.89	4,722.5	-492.1	680.1	839.1	0.00	0.00	
4,900.0	10.58	125.89	4,820.8	-502.9	694.9	857.4	0.00	0.00	
5,000.0	10.58	125.89	4,919.1	-513.6	709.8	875.8	0.00	0.00	
5,100.0	10.58	125.89	5,017.4	-524.4	724.7	894.1	0.00	0.00	
5,200.0	10.58	125.89	5,115.7	-535.1	739.5	912.5	0.00	0.00	
5,300.0	10.58	125.89	5,214.0	-545.9	754.4	930.8	0.00	0.00	
5,400.0	10.58	125.89	5,312.3	-556.7	769.3	949.2	0.00	0.00	
5,465.9	10.58	125.89	5,377.0	-563.8	779.1	961.2	0.00	0.00	Fort Union
5,500.0	10.58	125.89	5,410.6	-567.4	784.1	967.5	0.00	0.00	
5,600.0	10.58	125.89	5,508.9	-578.2	799.0	985.8	0.00	0.00	
5,700.0	10.58	125.89	5,607.2	-588.9	813.9	1,004.2	0.00	0.00	
5,800.0	10.58	125.89	5,705.5	-599.7	828.7	1,022.5	0.00	0.00	
5,900.0	10.58	125.89	5,803.8	-610.5	843.6	1,040.9	0.00	0.00	
6,000.0	10.58	125.89	5,902.1	-621.2	858.5	1,059.2	0.00	0.00	
6,100.0	10.58	125.89	6,000.4	-632.0	873.4	1,077.6	0.00	0.00	
6,200.0	10.58	125.89	6,098.7	-642.7	888.2	1,095.9	0.00	0.00	
6,300.0	10.58	125.89	6,197.0	-653.5	903.1	1,114.3	0.00	0.00	
6,400.0	10.58	125.89	6,295.3	-664.3	918.0	1,132.6	0.00	0.00	
6,500.0	10.58	125.89	6,393.6	-675.0	932.8	1,151.0	0.00	0.00	
6,600.0	10.58	125.89	6,491.9	-685.8	947.7	1,169.3	0.00	0.00	
6,700.0	10.58	125.89	6,590.2	-696.5	962.6	1,187.6	0.00	0.00	
6,788.3	10.58	125.89	6,677.0	-706.0	975.7	1,203.9	0.00	0.00	Ohio Creek
6,800.0	10.58	125.89	6,688.5	-707.3	977.4	1,206.0	0.00	0.00	
6,863.8	10.58	125.89	6,751.2	-714.2	986.9	1,217.7	0.00	0.00	Start Drop -2.00
6,900.0	9.85	125.89	6,786.8	-717.9	992.1	1,224.1	2.00	-2.00	
7,000.0	7.85	125.89	6,885.6	-727.0	1,004.6	1,239.5	2.00	-2.00	
7,100.0	5.85	125.89	6,984.9	-733.9	1,014.3	1,251.4	2.00	-2.00	
7,192.4	4.00	125.89	7,077.0	-738.6	1,020.7	1,259.4	2.00	-2.00	Williams Fork

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-5D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-5D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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
7,200.0	3.85	125.89	7,084.5	-738.9	1,021.1	1,259.9	2.00	-2.00	
7,300.0	1.85	125.89	7,184.4	-741.8	1,025.1	1,264.8	2.00	-2.00	
7,392.6	0.00	0.00	7,277.0	-742.7	1,026.3	1,266.3	2.00	-2.00	EOD @ Inc. = 0° - Approx. Top Gas - Chevron 5-5D
7,400.0	0.02	240.02	7,284.4	-742.7	1,026.3	1,266.3	0.25	0.25	
7,500.0	0.27	240.02	7,384.4	-742.8	1,026.1	1,266.2	0.25	0.25	
7,600.0	0.52	240.02	7,484.4	-743.2	1,025.5	1,266.0	0.25	0.25	
7,700.0	0.77	240.02	7,584.4	-743.7	1,024.6	1,265.6	0.25	0.25	
7,722.0	0.82	240.02	7,606.3	-743.9	1,024.3	1,265.4	0.25	0.25	
7,800.0	0.82	240.02	7,684.4	-744.4	1,023.3	1,265.0	0.00	0.00	
7,900.0	0.82	240.02	7,784.4	-745.2	1,022.1	1,264.5	0.00	0.00	
8,000.0	0.82	240.02	7,884.4	-745.9	1,020.8	1,263.9	0.00	0.00	
8,100.0	0.82	240.02	7,984.4	-746.6	1,019.6	1,263.4	0.00	0.00	
8,200.0	0.82	240.02	8,084.3	-747.3	1,018.3	1,262.8	0.00	0.00	
8,300.0	0.82	240.02	8,184.3	-748.0	1,017.1	1,262.3	0.00	0.00	
8,400.0	0.82	240.02	8,284.3	-748.8	1,015.9	1,261.7	0.00	0.00	
8,500.0	0.82	240.02	8,384.3	-749.5	1,014.6	1,261.2	0.00	0.00	
8,600.0	0.82	240.02	8,484.3	-750.2	1,013.4	1,260.6	0.00	0.00	
8,700.0	0.82	240.02	8,584.3	-750.9	1,012.1	1,260.1	0.00	0.00	
8,800.0	0.82	240.02	8,684.3	-751.6	1,010.9	1,259.5	0.00	0.00	
8,900.0	0.82	240.02	8,784.3	-752.3	1,009.6	1,259.0	0.00	0.00	
9,000.0	0.82	240.02	8,884.3	-753.1	1,008.4	1,258.4	0.00	0.00	
9,100.0	0.82	240.02	8,984.2	-753.8	1,007.1	1,257.9	0.00	0.00	
9,200.0	0.82	240.02	9,084.2	-754.5	1,005.9	1,257.3	0.00	0.00	
9,300.0	0.82	240.02	9,184.2	-755.2	1,004.7	1,256.8	0.00	0.00	
9,400.0	0.82	240.02	9,284.2	-755.9	1,003.4	1,256.2	0.00	0.00	
9,500.0	0.82	240.02	9,384.2	-756.7	1,002.2	1,255.7	0.00	0.00	
9,600.0	0.82	240.02	9,484.2	-757.4	1,000.9	1,255.1	0.00	0.00	
9,700.0	0.82	240.02	9,584.2	-758.1	999.7	1,254.6	0.00	0.00	
9,800.0	0.82	240.02	9,684.2	-758.8	998.4	1,254.0	0.00	0.00	
9,842.8	0.82	240.02	9,727.0	-759.1	997.9	1,253.8	0.00	0.00	Cameo
9,900.0	0.82	240.02	9,784.2	-759.5	997.2	1,253.5	0.00	0.00	
10,000.0	0.82	240.02	9,884.2	-760.2	995.9	1,252.9	0.00	0.00	
10,100.0	0.82	240.02	9,984.1	-761.0	994.7	1,252.4	0.00	0.00	
10,192.9	0.82	240.02	10,077.0	-761.6	993.5	1,251.9	0.00	0.00	Rollins SS
10,200.0	0.82	240.02	10,084.1	-761.7	993.5	1,251.8	0.00	0.00	
10,300.0	0.82	240.02	10,184.1	-762.4	992.2	1,251.3	0.00	0.00	
10,342.9	0.82	240.02	10,227.0	-762.7	991.7	1,251.1	0.00	0.00	Chevron 5-5D PBHL

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-5D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-5D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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 5-5D TGT	0.00	0.00	7,277.0	-742.7	1,026.3	1,637,623.24	2,257,841.60	39.554531	-108.132471
- plan hits target center									
- Point									
Chevron 5-5D PBHL	0.00	0.00	10,227.0	-762.7	991.7	1,637,604.25	2,257,806.36	39.554476	-108.132594
- plan hits target center									
- Polygon									
Point 1			10,227.0	70.0	-100.0	1,637,677.12	2,257,708.44		
Point 2			10,227.0	70.0	100.0	1,637,671.32	2,257,908.35		
Point 3			10,227.0	-20.0	100.0	1,637,581.36	2,257,905.74		
Point 4			10,227.0	-20.0	-100.0	1,637,587.16	2,257,705.83		

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
3,329.6	3,277.0	Wasatch				
5,465.9	5,377.0	Fort Union				
6,788.3	6,677.0	Ohio Creek				
7,192.4	7,077.0	Williams Fork				
7,392.6	7,277.0	Approx. Top Gas				
9,842.8	9,727.0	Cameo				
10,192.9	10,077.0	Rollins SS				

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'	
252.9	252.6	-2.9	3.9	EOB @ Inc. = 10.58°	
6,863.8	6,751.2	-714.2	986.9	Start Drop -2.00	
7,392.6	7,277.0	-742.7	1,026.3	EOD @ Inc. = 0°	
10,342.9	10,227.0	-762.7	991.7	TD @ 10,342' MD	

Berry Petroleum Company (NAD 83)

**Garfield County
Chevron E05 696
Chevron 5-5D
DD
Plan #1**

Anticollision Report

14 January, 2011

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
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 1,234.3ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	1/14/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,342.9	Plan #1 (DD)	MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Chevron E05 696						
Chevron 5-17D - DD - Plan #1	200.0	200.0	14.9	14.3	23.758	CC, ES, SF
Chevron 5-18D - DD - Plan #1	200.0	200.0	29.9	29.2	47.516	CC, ES
Chevron 5-18D - DD - Plan #1	300.0	297.9	40.9	39.9	40.909	SF
Chevron 5-19D - DD - Plan #1	200.0	200.0	60.0	59.4	95.465	CC, ES
Chevron 5-19D - DD - Plan #1	5,100.0	5,044.6	1,233.5	1,214.0	63.461	SF
Chevron 5-20D - DD - Plan #1	200.0	200.0	44.8	44.2	71.274	CC, ES
Chevron 5-20D - DD - Plan #1	400.0	392.5	75.5	74.2	55.087	SF
Chevron 5-6D - DD - Plan #1	300.0	299.0	12.2	11.1	11.603	CC, ES
Chevron 5-6D - DD - Plan #1	6,000.0	5,998.1	169.7	132.3	4.529	SF
Chevron 5-7D - DD - Plan #1	322.1	320.1	25.2	24.0	21.713	CC, ES
Chevron 5-7D - DD - Plan #1	5,500.0	5,477.8	466.6	429.7	12.666	SF
Chevron 5-8D - DD - Plan #1	342.2	338.7	39.1	37.8	31.183	CC, ES
Chevron 5-8D - DD - Plan #1	10,342.9	10,309.3	955.0	907.0	19.918	SF

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-17D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-105.57	-4.0	-14.4	14.9					
100.0	100.0	100.0	100.0	0.1	0.1	-105.57	-4.0	-14.4	14.9	14.6	0.28	53.456		
200.0	200.0	200.0	200.0	0.3	0.3	-105.57	-4.0	-14.4	14.9	14.3	0.63	23.758	CC, ES, SF	
300.0	298.9	298.7	298.6	0.6	0.5	148.78	-5.6	-15.0	26.1	25.1	0.99	26.280		
400.0	397.2	396.8	396.6	0.9	0.7	154.83	-10.2	-17.0	43.6	42.2	1.38	31.536		
500.0	495.5	494.7	494.2	1.2	0.9	154.28	-18.0	-20.2	62.0	60.1	1.82	34.095		
600.0	593.8	592.2	591.0	1.6	1.2	151.64	-28.8	-24.7	81.1	78.8	2.31	35.097		
700.0	692.1	689.2	686.8	2.0	1.5	148.19	-42.5	-30.4	101.3	98.4	2.87	35.314		
800.0	790.4	786.5	782.6	2.3	1.8	144.92	-58.2	-36.9	122.5	119.1	3.45	35.472		
900.0	888.7	884.0	878.6	2.7	2.1	142.60	-74.0	-43.5	144.0	140.0	4.04	35.604		
1,000.0	987.0	981.5	974.7	3.1	2.4	140.88	-89.7	-50.0	165.7	161.0	4.64	35.724		
1,100.0	1,085.3	1,079.1	1,070.7	3.4	2.8	139.56	-105.5	-56.6	187.4	182.2	5.23	35.832		
1,200.0	1,183.6	1,176.6	1,166.7	3.8	3.1	138.51	-121.3	-63.2	209.3	203.5	5.82	35.928		
1,300.0	1,281.9	1,274.1	1,262.7	4.2	3.5	137.66	-137.1	-69.7	231.2	224.8	6.42	36.014		
1,400.0	1,380.2	1,371.6	1,358.7	4.5	3.8	136.96	-152.8	-76.3	253.1	246.1	7.01	36.091		
1,500.0	1,478.5	1,469.2	1,454.7	4.9	4.1	136.37	-168.6	-82.9	275.1	267.5	7.61	36.159		
1,600.0	1,576.8	1,566.7	1,550.7	5.3	4.5	135.87	-184.4	-89.4	297.1	288.9	8.20	36.221		
1,700.0	1,675.1	1,664.2	1,646.7	5.6	4.8	135.43	-200.2	-96.0	319.1	310.3	8.80	36.277		
1,800.0	1,773.4	1,761.7	1,742.8	6.0	5.2	135.06	-215.9	-102.5	341.1	331.7	9.39	36.327		
1,900.0	1,871.7	1,859.2	1,838.8	6.4	5.5	134.72	-231.7	-109.1	363.2	353.2	9.98	36.373		
2,000.0	1,970.0	1,956.8	1,934.8	6.7	5.8	134.43	-247.5	-115.7	385.2	374.6	10.58	36.415		
2,100.0	2,068.3	2,054.3	2,030.8	7.1	6.2	134.17	-263.3	-122.2	407.3	396.1	11.17	36.453		
2,200.0	2,166.6	2,151.8	2,126.8	7.5	6.5	133.93	-279.0	-128.8	429.3	417.6	11.77	36.488		
2,300.0	2,264.9	2,249.3	2,222.8	7.8	6.9	133.72	-294.8	-135.3	451.4	439.0	12.36	36.520		
2,400.0	2,363.2	2,346.8	2,318.8	8.2	7.2	133.53	-310.6	-141.9	473.5	460.5	12.95	36.550		
2,500.0	2,461.5	2,444.4	2,414.8	8.6	7.6	133.35	-326.4	-148.5	495.6	482.0	13.55	36.578		
2,600.0	2,559.8	2,541.9	2,510.9	8.9	7.9	133.19	-342.1	-155.0	517.6	503.5	14.14	36.603		
2,700.0	2,658.1	2,639.4	2,606.9	9.3	8.2	133.05	-357.9	-161.6	539.7	525.0	14.74	36.627		
2,800.0	2,756.4	2,736.9	2,702.9	9.7	8.6	132.91	-373.7	-168.2	561.8	546.5	15.33	36.650		
2,900.0	2,854.7	2,834.4	2,798.9	10.0	8.9	132.79	-389.5	-174.7	583.9	568.0	15.92	36.671		
3,000.0	2,953.0	2,932.0	2,894.9	10.4	9.3	132.67	-405.2	-181.3	606.0	589.5	16.52	36.690		
3,100.0	3,051.3	3,029.5	2,990.9	10.8	9.6	132.56	-421.0	-187.8	628.1	611.0	17.11	36.708		
3,200.0	3,149.6	3,127.0	3,086.9	11.1	10.0	132.46	-436.8	-194.4	650.2	632.5	17.70	36.726		
3,300.0	3,247.9	3,224.5	3,182.9	11.5	10.3	132.37	-452.6	-201.0	672.3	654.0	18.30	36.742		
3,400.0	3,346.2	3,322.0	3,279.0	11.9	10.6	132.28	-468.3	-207.5	694.4	675.5	18.89	36.757		
3,500.0	3,444.5	3,419.6	3,375.0	12.3	11.0	132.20	-484.1	-214.1	716.5	697.1	19.49	36.772		
3,600.0	3,542.8	3,517.1	3,471.0	12.6	11.3	132.12	-499.9	-220.7	738.6	718.6	20.08	36.786		
3,700.0	3,641.1	3,614.6	3,567.0	13.0	11.7	132.05	-515.7	-227.2	760.8	740.1	20.67	36.799		
3,800.0	3,739.4	3,712.1	3,663.0	13.4	12.0	131.98	-531.4	-233.8	782.9	761.6	21.27	36.811		
3,900.0	3,837.7	3,809.7	3,759.0	13.7	12.4	131.91	-547.2	-240.3	805.0	783.1	21.86	36.823		
4,000.0	3,936.0	3,907.2	3,855.0	14.1	12.7	131.85	-563.0	-246.9	827.1	804.6	22.45	36.834		
4,100.0	4,034.3	4,004.7	3,951.0	14.5	13.1	131.79	-578.8	-253.5	849.2	826.2	23.05	36.845		
4,200.0	4,132.6	4,102.2	4,047.1	14.8	13.4	131.74	-594.5	-260.0	871.3	847.7	23.64	36.855		
4,300.0	4,231.0	4,199.7	4,143.1	15.2	13.7	131.68	-610.3	-266.6	893.4	869.2	24.24	36.864		
4,400.0	4,329.3	4,297.3	4,239.1	15.6	14.1	131.63	-626.1	-273.2	915.5	890.7	24.83	36.874		
4,500.0	4,427.6	4,394.8	4,335.1	15.9	14.4	131.58	-641.9	-279.7	937.7	912.2	25.42	36.883		
4,600.0	4,525.9	4,492.3	4,431.1	16.3	14.8	131.54	-657.7	-286.3	959.8	933.8	26.02	36.891		
4,700.0	4,624.2	4,589.8	4,527.1	16.7	15.1	131.49	-673.4	-292.8	981.9	955.3	26.61	36.899		
4,800.0	4,722.5	4,687.3	4,623.1	17.0	15.5	131.45	-689.2	-299.4	1,004.0	976.8	27.20	36.907		
4,900.0	4,820.8	4,784.9	4,719.1	17.4	15.8	131.41	-705.0	-306.0	1,026.1	998.3	27.80	36.915		
5,000.0	4,919.1	4,882.4	4,815.2	17.8	16.1	131.38	-720.8	-312.5	1,048.3	1,019.9	28.39	36.922		
5,100.0	5,017.4	4,979.9	4,911.2	18.1	16.5	131.34	-736.5	-319.1	1,070.4	1,041.4	28.98	36.929		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-17D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						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	5,115.7	5,094.0	5,023.6	18.5	16.9	131.34	-754.0	-326.4	1,092.0	1,062.4	29.60	36.890		
5,300.0	5,214.0	5,219.2	5,147.9	18.9	17.2	131.56	-768.8	-332.5	1,111.5	1,081.3	30.18	36.833		
5,400.0	5,312.3	5,345.2	5,273.4	19.2	17.4	132.01	-778.5	-336.5	1,128.5	1,097.8	30.68	36.783		
5,500.0	5,410.6	5,471.4	5,399.4	19.6	17.6	132.67	-783.1	-338.5	1,143.2	1,112.1	31.11	36.745		
5,600.0	5,508.9	5,578.1	5,506.2	20.0	17.7	133.37	-783.5	-338.7	1,156.1	1,124.6	31.49	36.718		
5,700.0	5,607.2	5,671.9	5,600.0	20.3	17.8	133.98	-783.8	-339.1	1,169.3	1,137.5	31.85	36.718		
5,800.0	5,705.5	5,767.8	5,695.8	20.7	17.9	134.59	-784.1	-339.7	1,183.0	1,150.8	32.20	36.735		
5,900.0	5,803.8	5,866.0	5,794.1	21.1	18.0	135.19	-784.6	-340.5	1,196.9	1,164.3	32.56	36.760		
6,000.0	5,902.1	5,964.2	5,892.3	21.4	18.1	135.79	-785.0	-341.2	1,210.9	1,178.0	32.91	36.793		
6,100.0	6,000.4	6,062.5	5,990.5	21.8	18.2	136.36	-785.4	-342.0	1,225.0	1,191.7	33.26	36.833		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-18D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	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	-105.57	-8.0	-28.8	29.9					
100.0	100.0	100.0	100.0	0.1	0.1	-105.57	-8.0	-28.8	29.9	29.6	0.28	106.911		
200.0	200.0	200.0	200.0	0.3	0.3	-105.57	-8.0	-28.8	29.9	29.2	0.63	47.516 CC, ES		
300.0	298.9	297.9	297.9	0.6	0.5	141.64	-9.2	-29.9	40.9	39.9	1.00	40.909 SF		
400.0	397.2	394.9	394.7	0.9	0.7	149.11	-12.8	-33.3	59.5	58.1	1.39	42.699		
500.0	495.5	491.2	490.7	1.2	0.9	151.03	-18.8	-38.9	80.5	78.6	1.81	44.471		
600.0	593.8	586.8	585.6	1.6	1.1	150.66	-27.0	-46.7	103.4	101.1	2.26	45.719		
700.0	692.1	681.3	679.0	2.0	1.4	149.26	-37.3	-56.5	128.3	125.5	2.75	46.582		
800.0	790.4	777.0	773.3	2.3	1.8	147.62	-49.5	-67.9	154.6	151.4	3.27	47.328		
900.0	888.7	873.4	868.2	2.7	2.1	146.42	-61.7	-79.5	181.1	177.4	3.79	47.826		
1,000.0	987.0	969.7	963.0	3.1	2.4	145.53	-74.0	-91.1	207.7	203.4	4.31	48.188		
1,100.0	1,085.3	1,066.1	1,057.9	3.4	2.7	144.84	-86.2	-102.7	234.3	229.5	4.83	48.464		
1,200.0	1,183.6	1,162.5	1,152.8	3.8	3.1	144.29	-98.5	-114.2	260.9	255.5	5.36	48.682		
1,300.0	1,281.9	1,258.8	1,247.7	4.2	3.4	143.85	-110.8	-125.8	287.5	281.7	5.89	48.858		
1,400.0	1,380.2	1,355.2	1,342.6	4.5	3.7	143.48	-123.0	-137.4	314.2	307.8	6.41	49.003		
1,500.0	1,478.5	1,451.6	1,437.4	4.9	4.1	143.16	-135.3	-149.0	340.9	333.9	6.94	49.126		
1,600.0	1,576.8	1,547.9	1,532.3	5.3	4.4	142.90	-147.6	-160.6	367.5	360.1	7.47	49.230		
1,700.0	1,675.1	1,644.3	1,627.2	5.6	4.8	142.67	-159.8	-172.2	394.2	386.2	7.99	49.320		
1,800.0	1,773.4	1,740.7	1,722.1	6.0	5.1	142.46	-172.1	-183.7	420.9	412.4	8.52	49.398		
1,900.0	1,871.7	1,837.0	1,816.9	6.4	5.4	142.29	-184.4	-195.3	447.6	438.5	9.05	49.467		
2,000.0	1,970.0	1,933.4	1,911.8	6.7	5.8	142.13	-196.6	-206.9	474.2	464.7	9.58	49.529		
2,100.0	2,068.3	2,029.8	2,006.7	7.1	6.1	141.99	-208.9	-218.5	500.9	490.8	10.10	49.583		
2,200.0	2,166.6	2,126.1	2,101.6	7.5	6.5	141.86	-221.1	-230.1	527.6	517.0	10.63	49.632		
2,300.0	2,264.9	2,222.5	2,196.4	7.8	6.8	141.75	-233.4	-241.7	554.3	543.2	11.16	49.677		
2,400.0	2,363.2	2,318.9	2,291.3	8.2	7.1	141.64	-245.7	-253.2	581.0	569.3	11.69	49.717		
2,500.0	2,461.5	2,415.2	2,386.2	8.6	7.5	141.55	-257.9	-264.8	607.7	595.5	12.21	49.754		
2,600.0	2,559.8	2,511.6	2,481.1	8.9	7.8	141.46	-270.2	-276.4	634.4	621.7	12.74	49.787		
2,700.0	2,658.1	2,608.0	2,576.0	9.3	8.2	141.38	-282.5	-288.0	661.1	647.8	13.27	49.818		
2,800.0	2,756.4	2,704.3	2,670.8	9.7	8.5	141.31	-294.7	-299.6	687.8	674.0	13.80	49.847		
2,900.0	2,854.7	2,800.7	2,765.7	10.0	8.8	141.24	-307.0	-311.2	714.5	700.2	14.33	49.873		
3,000.0	2,953.0	2,897.1	2,860.6	10.4	9.2	141.17	-319.2	-322.7	741.2	726.4	14.86	49.897		
3,100.0	3,051.3	2,993.4	2,955.5	10.8	9.5	141.12	-331.5	-334.3	767.9	752.6	15.38	49.920		
3,200.0	3,149.6	3,089.8	3,050.3	11.1	9.9	141.06	-343.8	-345.9	794.6	778.7	15.91	49.941		
3,300.0	3,247.9	3,186.1	3,145.2	11.5	10.2	141.01	-356.0	-357.5	821.3	804.9	16.44	49.961		
3,400.0	3,346.2	3,282.5	3,240.1	11.9	10.5	140.96	-368.3	-369.1	848.1	831.1	16.97	49.980		
3,500.0	3,444.5	3,378.9	3,335.0	12.3	10.9	140.92	-380.6	-380.7	874.8	857.3	17.50	49.997		
3,600.0	3,542.8	3,475.2	3,429.9	12.6	11.2	140.87	-392.8	-392.2	901.5	883.4	18.02	50.014		
3,700.0	3,641.1	3,571.6	3,524.7	13.0	11.6	140.83	-405.1	-403.8	928.2	909.6	18.55	50.029		
3,800.0	3,739.4	3,668.0	3,619.6	13.4	11.9	140.80	-417.4	-415.4	954.9	935.8	19.08	50.044		
3,900.0	3,837.7	3,769.6	3,719.7	13.7	12.3	140.76	-430.2	-427.6	981.6	961.9	19.62	50.028		
4,000.0	3,936.0	3,898.6	3,847.3	14.1	12.6	140.87	-443.9	-440.4	1,006.2	986.0	20.18	49.855		
4,100.0	4,034.3	4,029.4	3,977.4	14.5	12.9	141.22	-453.4	-449.5	1,027.7	1,007.0	20.69	49.682		
4,200.0	4,132.6	4,161.3	4,109.2	14.8	13.1	141.78	-458.7	-454.4	1,046.0	1,024.9	21.13	49.496		
4,300.0	4,231.0	4,281.9	4,229.7	15.2	13.2	142.47	-459.7	-455.4	1,061.4	1,039.8	21.52	49.311		
4,400.0	4,329.3	4,376.4	4,324.2	15.6	13.3	143.03	-459.9	-455.7	1,076.3	1,054.5	21.88	49.192		
4,500.0	4,427.6	4,473.3	4,421.1	15.9	13.4	143.59	-460.2	-456.3	1,091.7	1,069.5	22.24	49.093		
4,600.0	4,525.9	4,571.6	4,519.4	16.3	13.5	144.13	-460.5	-456.8	1,107.2	1,084.6	22.59	49.006		
4,700.0	4,624.2	4,669.8	4,617.6	16.7	13.6	144.66	-460.9	-457.4	1,122.8	1,099.9	22.95	48.932		
4,800.0	4,722.5	4,768.1	4,715.9	17.0	13.8	145.17	-461.2	-458.0	1,138.5	1,115.2	23.30	48.870		
4,900.0	4,820.8	4,866.3	4,814.1	17.4	13.9	145.67	-461.5	-458.6	1,154.3	1,130.6	23.64	48.819		
5,000.0	4,919.1	4,964.6	4,912.4	17.8	14.0	146.16	-461.9	-459.1	1,170.1	1,146.1	23.99	48.777		
5,100.0	5,017.4	5,062.8	5,010.6	18.1	14.1	146.63	-462.2	-459.7	1,186.0	1,161.7	24.33	48.744		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-18D - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,115.7	5,161.1	5,108.8	18.5	14.2	147.09	-462.5	-460.3	1,202.0	1,177.4	24.67	48.718	
5,300.0	5,214.0	5,259.3	5,207.1	18.9	14.3	147.54	-462.9	-460.9	1,218.1	1,193.1	25.01	48.701	

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-19D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	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	-105.50	-16.0	-57.8	60.0					
100.0	100.0	100.0	100.0	0.1	0.1	-105.50	-16.0	-57.8	60.0	59.7	0.28	214.795		
200.0	200.0	200.0	200.0	0.3	0.3	-105.50	-16.0	-57.8	60.0	59.4	0.63	95.465 CC, ES		
300.0	298.9	296.6	296.5	0.6	0.5	136.47	-16.4	-59.4	70.9	69.9	1.00	70.685		
400.0	397.2	391.5	391.4	0.9	0.7	143.91	-17.6	-64.0	90.0	88.6	1.39	64.530		
500.0	495.5	485.4	484.9	1.2	0.9	148.16	-19.6	-71.5	113.2	111.4	1.78	63.603		
600.0	593.8	577.8	576.8	1.6	1.1	150.48	-22.3	-81.9	139.7	137.5	2.17	64.499		
700.0	692.1	668.8	666.7	2.0	1.4	151.65	-25.6	-94.9	169.1	166.6	2.56	66.085		
800.0	790.4	761.3	757.8	2.3	1.7	152.20	-29.7	-110.4	201.0	198.0	2.96	67.805		
900.0	888.7	856.0	851.0	2.7	2.0	152.57	-33.9	-126.6	233.1	229.8	3.38	69.036		
1,000.0	987.0	950.7	944.2	3.1	2.4	152.86	-38.1	-142.8	265.3	261.5	3.79	69.956		
1,100.0	1,085.3	1,045.3	1,037.4	3.4	2.7	153.08	-42.3	-159.1	297.4	293.2	4.21	70.665		
1,200.0	1,183.6	1,140.0	1,130.5	3.8	3.0	153.26	-46.5	-175.3	329.6	325.0	4.63	71.227		
1,300.0	1,281.9	1,234.7	1,223.7	4.2	3.4	153.41	-50.7	-191.5	361.8	356.7	5.05	71.682		
1,400.0	1,380.2	1,329.4	1,316.9	4.5	3.7	153.53	-54.9	-207.7	394.0	388.5	5.47	72.057		
1,500.0	1,478.5	1,424.1	1,410.1	4.9	4.0	153.64	-59.1	-223.9	426.1	420.2	5.89	72.371		
1,600.0	1,576.8	1,518.7	1,503.3	5.3	4.4	153.73	-63.3	-240.1	458.3	452.0	6.31	72.638		
1,700.0	1,675.1	1,613.4	1,596.5	5.6	4.7	153.81	-67.5	-256.4	490.5	483.7	6.73	72.867		
1,800.0	1,773.4	1,708.1	1,689.7	6.0	5.0	153.88	-71.7	-272.6	522.6	515.5	7.15	73.066		
1,900.0	1,871.7	1,802.8	1,782.9	6.4	5.4	153.94	-75.9	-288.8	554.8	547.2	7.58	73.240		
2,000.0	1,970.0	1,897.5	1,876.0	6.7	5.7	153.99	-80.1	-305.0	587.0	579.0	8.00	73.394		
2,100.0	2,068.3	1,992.1	1,969.2	7.1	6.0	154.04	-84.3	-321.2	619.2	610.7	8.42	73.530		
2,200.0	2,166.6	2,086.8	2,062.4	7.5	6.4	154.08	-88.5	-337.4	651.3	642.5	8.84	73.652		
2,300.0	2,264.9	2,181.5	2,155.6	7.8	6.7	154.12	-92.7	-353.7	683.5	674.2	9.27	73.762		
2,400.0	2,363.2	2,276.2	2,248.8	8.2	7.1	154.16	-96.9	-369.9	715.7	706.0	9.69	73.861		
2,500.0	2,461.5	2,370.9	2,342.0	8.6	7.4	154.19	-101.1	-386.1	747.9	737.8	10.11	73.952		
2,600.0	2,559.8	2,496.0	2,465.6	8.9	7.8	154.32	-106.0	-405.0	778.2	767.6	10.58	73.546		
2,700.0	2,658.1	2,624.4	2,593.1	9.3	8.1	154.62	-109.6	-418.9	804.7	793.7	11.03	72.959		
2,800.0	2,756.4	2,755.2	2,723.6	9.7	8.3	155.08	-111.8	-427.4	827.3	815.9	11.46	72.206		
2,900.0	2,854.7	2,886.2	2,854.6	10.0	8.4	155.69	-112.5	-430.1	845.9	834.1	11.86	71.313		
3,000.0	2,953.0	2,981.8	2,950.3	10.4	8.6	156.17	-112.6	-430.2	862.9	850.7	12.21	70.650		
3,100.0	3,051.3	3,079.4	3,047.8	10.8	8.7	156.62	-112.9	-430.7	880.2	867.6	12.57	70.039		
3,200.0	3,149.6	3,177.6	3,146.0	11.1	8.8	157.06	-113.2	-431.2	897.5	884.5	12.92	69.470		
3,300.0	3,247.9	3,275.9	3,244.3	11.5	8.9	157.49	-113.4	-431.6	914.8	901.6	13.27	68.942		
3,400.0	3,346.2	3,374.2	3,342.6	11.9	9.0	157.89	-113.7	-432.1	932.2	918.6	13.62	68.452		
3,500.0	3,444.5	3,472.4	3,440.8	12.3	9.1	158.29	-114.0	-432.6	949.7	935.7	13.97	67.996		
3,600.0	3,542.8	3,570.7	3,539.1	12.6	9.3	158.67	-114.3	-433.0	967.2	952.9	14.31	67.570		
3,700.0	3,641.1	3,668.9	3,637.3	13.0	9.4	159.03	-114.5	-433.5	984.7	970.1	14.66	67.171		
3,800.0	3,739.4	3,767.2	3,735.6	13.4	9.5	159.38	-114.8	-434.0	1,002.3	987.3	15.01	66.798		
3,900.0	3,837.7	3,865.5	3,833.8	13.7	9.6	159.72	-115.1	-434.4	1,019.9	1,004.6	15.35	66.447		
4,000.0	3,936.0	3,963.7	3,932.1	14.1	9.8	160.05	-115.3	-434.9	1,037.6	1,021.9	15.69	66.118		
4,100.0	4,034.3	4,062.0	4,030.4	14.5	9.9	160.37	-115.6	-435.4	1,055.3	1,039.2	16.04	65.807		
4,200.0	4,132.6	4,160.2	4,128.6	14.8	10.0	160.68	-115.9	-435.8	1,073.0	1,056.6	16.38	65.513		
4,300.0	4,231.0	4,258.5	4,226.9	15.2	10.1	160.98	-116.2	-436.3	1,090.7	1,074.0	16.72	65.236		
4,400.0	4,329.3	4,356.7	4,325.1	15.6	10.3	161.26	-116.4	-436.8	1,108.5	1,091.4	17.06	64.973		
4,500.0	4,427.6	4,455.0	4,423.4	15.9	10.4	161.54	-116.7	-437.2	1,126.3	1,108.9	17.40	64.724		
4,600.0	4,525.9	4,553.3	4,521.6	16.3	10.5	161.81	-117.0	-437.7	1,144.1	1,126.3	17.74	64.487		
4,700.0	4,624.2	4,651.5	4,619.9	16.7	10.7	162.07	-117.2	-438.2	1,161.9	1,143.8	18.08	64.262		
4,800.0	4,722.5	4,749.8	4,718.2	17.0	10.8	162.33	-117.5	-438.7	1,179.8	1,161.4	18.42	64.047		
4,900.0	4,820.8	4,848.0	4,816.4	17.4	10.9	162.58	-117.8	-439.1	1,197.7	1,178.9	18.76	63.843		
5,000.0	4,919.1	4,946.3	4,914.7	17.8	11.1	162.81	-118.1	-439.6	1,215.6	1,196.5	19.10	63.648		
5,100.0	5,017.4	5,044.6	5,012.9	18.1	11.2	163.05	-118.3	-440.1	1,233.5	1,214.0	19.44	63.461 SF		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-20D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	-105.57	-12.0	-43.1	44.8					
100.0	100.0	100.0	100.0	0.1	0.1	-105.57	-12.0	-43.1	44.8	44.5	0.28	160.367		
200.0	200.0	200.0	200.0	0.3	0.3	-105.57	-12.0	-43.1	44.8	44.2	0.63	71.274 CC, ES		
300.0	298.9	297.3	297.3	0.6	0.5	139.95	-11.3	-44.6	55.7	54.7	1.00	55.703		
400.0	397.2	392.5	392.4	0.9	0.7	150.59	-9.2	-49.0	75.5	74.2	1.37	55.087 SF		
500.0	495.5	486.2	485.7	1.2	0.9	157.11	-5.8	-56.0	100.0	98.3	1.72	58.191		
600.0	593.8	578.2	577.1	1.6	1.1	161.24	-1.1	-65.6	128.4	126.3	2.05	62.511		
700.0	692.1	668.2	666.2	2.0	1.4	163.98	4.6	-77.5	160.1	157.8	2.38	67.254		
800.0	790.4	758.9	755.5	2.3	1.7	165.90	11.6	-91.8	194.8	192.1	2.71	71.953		
900.0	888.7	852.4	847.4	2.7	2.0	167.29	18.9	-106.9	230.1	227.0	3.04	75.722		
1,000.0	987.0	945.9	939.3	3.1	2.3	168.32	26.2	-122.0	265.4	262.0	3.37	78.764		
1,100.0	1,085.3	1,039.3	1,031.3	3.4	2.7	169.10	33.6	-137.1	300.8	297.1	3.70	81.263		
1,200.0	1,183.6	1,132.8	1,123.2	3.8	3.0	169.72	40.9	-152.2	336.3	332.2	4.03	83.348		
1,300.0	1,281.9	1,226.2	1,215.1	4.2	3.3	170.22	48.2	-167.3	371.7	367.4	4.37	85.114		
1,400.0	1,380.2	1,319.7	1,307.1	4.5	3.7	170.64	55.6	-182.4	407.2	402.5	4.70	86.627		
1,500.0	1,478.5	1,413.1	1,399.0	4.9	4.0	170.98	62.9	-197.5	442.7	437.7	5.03	87.936		
1,600.0	1,576.8	1,506.6	1,490.9	5.3	4.3	171.28	70.2	-212.7	478.2	472.9	5.37	89.081		
1,700.0	1,675.1	1,600.0	1,582.9	5.6	4.7	171.53	77.5	-227.8	513.8	508.1	5.70	90.090		
1,800.0	1,773.4	1,693.5	1,674.8	6.0	5.0	171.76	84.9	-242.9	549.3	543.3	6.04	90.986		
1,900.0	1,871.7	1,786.9	1,766.7	6.4	5.3	171.95	92.2	-258.0	584.8	578.5	6.37	91.786		
2,000.0	1,970.0	1,880.4	1,858.6	6.7	5.7	172.12	99.5	-273.1	620.4	613.7	6.71	92.505		
2,100.0	2,068.3	1,973.8	1,950.6	7.1	6.0	172.28	106.9	-288.2	655.9	648.9	7.04	93.155		
2,200.0	2,166.6	2,067.3	2,042.5	7.5	6.4	172.42	114.2	-303.3	691.5	684.1	7.38	93.745		
2,300.0	2,264.9	2,160.7	2,134.4	7.8	6.7	172.54	121.5	-318.4	727.1	719.3	7.71	94.283		
2,400.0	2,363.2	2,254.2	2,226.4	8.2	7.0	172.65	128.8	-333.5	762.6	754.6	8.05	94.775		
2,500.0	2,461.5	2,347.7	2,318.3	8.6	7.4	172.76	136.2	-348.6	798.2	789.8	8.38	95.228		
2,600.0	2,559.8	2,441.1	2,410.2	8.9	7.7	172.85	143.5	-363.7	833.7	825.0	8.72	95.645		
2,700.0	2,658.1	2,534.6	2,502.2	9.3	8.0	172.94	150.8	-378.9	869.3	860.3	9.05	96.031		
2,800.0	2,756.4	2,628.0	2,594.1	9.7	8.4	173.02	158.2	-394.0	904.9	895.5	9.39	96.389		
2,900.0	2,854.7	2,721.9	2,686.4	10.0	8.7	173.09	165.5	-409.1	940.4	930.7	9.72	96.715		
3,000.0	2,953.0	2,863.4	2,826.2	10.4	9.1	173.21	175.1	-428.9	973.7	963.5	10.14	96.027		
3,100.0	3,051.3	3,009.6	2,971.6	10.8	9.5	173.34	181.8	-442.7	1,002.1	991.6	10.56	94.861		
3,200.0	3,149.6	3,159.9	3,121.6	11.1	9.7	173.49	185.3	-449.9	1,025.6	1,014.6	11.00	93.260		
3,300.0	3,247.9	3,285.1	3,246.9	11.5	9.8	173.63	185.8	-450.9	1,044.6	1,033.2	11.39	91.717		
3,400.0	3,346.2	3,381.4	3,343.2	11.9	9.9	173.72	185.6	-451.3	1,063.0	1,051.3	11.73	90.602		
3,500.0	3,444.5	3,479.6	3,441.4	12.3	10.0	173.80	185.3	-451.8	1,081.6	1,069.5	12.08	89.531		
3,600.0	3,542.8	3,577.9	3,539.7	12.6	10.1	173.88	185.0	-452.3	1,100.1	1,087.7	12.43	88.522		
3,700.0	3,641.1	3,676.2	3,637.9	13.0	10.3	173.95	184.7	-452.7	1,118.6	1,105.8	12.77	87.568		
3,800.0	3,739.4	3,774.4	3,736.2	13.4	10.4	174.03	184.4	-453.2	1,137.2	1,124.0	13.12	86.666		
3,900.0	3,837.7	3,872.7	3,834.4	13.7	10.5	174.10	184.1	-453.7	1,155.7	1,142.2	13.47	85.811		
4,000.0	3,936.0	3,970.9	3,932.7	14.1	10.6	174.16	183.9	-454.2	1,174.2	1,160.4	13.81	85.000		
4,100.0	4,034.3	4,069.2	4,030.9	14.5	10.7	174.23	183.6	-454.7	1,192.8	1,178.6	14.16	84.228		
4,200.0	4,132.6	4,167.4	4,129.2	14.8	10.8	174.29	183.3	-455.2	1,211.3	1,196.8	14.51	83.495		
4,300.0	4,231.0	4,265.7	4,227.4	15.2	11.0	174.35	183.0	-455.7	1,229.9	1,215.0	14.85	82.796		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-6D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							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	74.43	4.0	14.4	14.9					
100.0	100.0	100.0	100.0	0.1	0.1	74.43	4.0	14.4	14.9	14.6	0.28	53.456		
200.0	200.0	200.0	200.0	0.3	0.3	74.43	4.0	14.4	14.9	14.3	0.63	23.758		
286.9	286.6	286.4	286.4	0.5	0.5	-73.06	3.4	15.5	12.4	11.4	0.99	12.534		
300.0	298.9	299.0	298.9	0.6	0.5	-101.78	3.2	15.9	12.2	11.1	1.05	11.603 CC, ES		
400.0	397.2	398.3	398.2	0.9	0.7	-141.21	0.8	20.4	20.2	18.8	1.43	14.121		
500.0	495.5	498.5	498.0	1.2	0.9	-151.68	-3.3	28.1	29.1	27.3	1.80	16.152		
600.0	593.8	599.2	597.9	1.6	1.2	-154.27	-9.1	38.9	35.5	33.3	2.21	16.094		
700.0	692.1	700.3	697.7	2.0	1.5	-153.33	-16.6	52.8	39.1	36.4	2.67	14.620		
800.0	790.4	800.2	796.2	2.3	1.8	-151.11	-24.8	68.1	41.1	38.0	3.18	12.923		
900.0	888.7	900.2	894.6	2.7	2.2	-149.10	-33.0	83.5	43.3	39.5	3.72	11.629		
1,000.0	987.0	1,000.2	993.0	3.1	2.5	-147.28	-41.2	98.8	45.4	41.2	4.28	10.620		
1,100.0	1,085.3	1,100.1	1,091.5	3.4	2.9	-145.63	-49.4	114.2	47.7	42.8	4.86	9.815		
1,200.0	1,183.6	1,200.1	1,189.9	3.8	3.2	-144.13	-57.7	129.5	49.9	44.5	5.45	9.163		
1,300.0	1,281.9	1,300.1	1,288.4	4.2	3.6	-142.76	-65.9	144.9	52.2	46.1	6.05	8.625		
1,400.0	1,380.2	1,400.0	1,386.8	4.5	3.9	-141.50	-74.1	160.2	54.5	47.8	6.67	8.177		
1,500.0	1,478.5	1,500.0	1,485.2	4.9	4.3	-140.35	-82.3	175.6	56.8	49.5	7.29	7.797		
1,600.0	1,576.8	1,600.0	1,583.7	5.3	4.6	-139.28	-90.5	190.9	59.2	51.3	7.92	7.474		
1,700.0	1,675.1	1,699.9	1,682.1	5.6	5.0	-138.30	-98.8	206.3	61.6	53.0	8.56	7.195		
1,800.0	1,773.4	1,799.9	1,780.5	6.0	5.3	-137.40	-107.0	221.7	64.0	54.8	9.20	6.952		
1,900.0	1,871.7	1,899.9	1,879.0	6.4	5.7	-136.55	-115.2	237.0	66.4	56.5	9.85	6.739		
2,000.0	1,970.0	1,999.8	1,977.4	6.7	6.0	-135.77	-123.4	252.4	68.8	58.3	10.50	6.552		
2,100.0	2,068.3	2,099.8	2,075.9	7.1	6.4	-135.04	-131.6	267.7	71.2	60.1	11.15	6.385		
2,200.0	2,166.6	2,199.8	2,174.3	7.5	6.7	-134.36	-139.8	283.1	73.7	61.8	11.81	6.236		
2,300.0	2,264.9	2,299.7	2,272.7	7.8	7.1	-133.72	-148.1	298.4	76.1	63.6	12.47	6.103		
2,400.0	2,363.2	2,399.7	2,371.2	8.2	7.4	-133.13	-156.3	313.8	78.6	65.4	13.13	5.982		
2,500.0	2,461.5	2,499.7	2,469.6	8.6	7.8	-132.56	-164.5	329.1	81.0	67.2	13.80	5.873		
2,600.0	2,559.8	2,599.6	2,568.1	8.9	8.1	-132.04	-172.7	344.5	83.5	69.0	14.46	5.774		
2,700.0	2,658.1	2,699.6	2,666.5	9.3	8.5	-131.54	-180.9	359.8	86.0	70.9	15.13	5.683		
2,800.0	2,756.4	2,799.6	2,764.9	9.7	8.8	-131.07	-189.2	375.2	88.5	72.7	15.80	5.600		
2,900.0	2,854.7	2,899.5	2,863.4	10.0	9.2	-130.63	-197.4	390.5	91.0	74.5	16.47	5.524		
3,000.0	2,953.0	2,999.5	2,961.8	10.4	9.5	-130.21	-205.6	405.9	93.5	76.3	17.14	5.453		
3,100.0	3,051.3	3,099.5	3,060.2	10.8	9.9	-129.81	-213.8	421.2	96.0	78.2	17.81	5.388		
3,200.0	3,149.6	3,199.4	3,158.7	11.1	10.2	-129.43	-222.0	436.6	98.5	80.0	18.49	5.327		
3,300.0	3,247.9	3,299.4	3,257.1	11.5	10.6	-129.07	-230.3	451.9	101.0	81.8	19.16	5.271		
3,400.0	3,346.2	3,399.4	3,355.6	11.9	10.9	-128.73	-238.5	467.3	103.5	83.7	19.83	5.219		
3,500.0	3,444.5	3,499.3	3,454.0	12.3	11.3	-128.40	-246.7	482.6	106.0	85.5	20.51	5.170		
3,600.0	3,542.8	3,599.3	3,552.4	12.6	11.7	-128.09	-254.9	498.0	108.6	87.4	21.19	5.124		
3,700.0	3,641.1	3,699.3	3,650.9	13.0	12.0	-127.80	-263.1	513.3	111.1	89.2	21.86	5.081		
3,800.0	3,739.4	3,799.2	3,749.3	13.4	12.4	-127.51	-271.4	528.7	113.6	91.1	22.54	5.041		
3,900.0	3,837.7	3,899.2	3,847.8	13.7	12.7	-127.24	-279.6	544.0	116.1	92.9	23.22	5.003		
4,000.0	3,936.0	3,999.2	3,946.2	14.1	13.1	-126.98	-287.8	559.4	118.7	94.8	23.89	4.967		
4,100.0	4,034.3	4,099.1	4,044.6	14.5	13.4	-126.74	-296.0	574.7	121.2	96.6	24.57	4.934		
4,200.0	4,132.6	4,199.1	4,143.1	14.8	13.8	-126.50	-304.2	590.1	123.8	98.5	25.25	4.902		
4,300.0	4,231.0	4,299.1	4,241.5	15.2	14.1	-126.27	-312.5	605.4	126.3	100.4	25.93	4.871		
4,400.0	4,329.3	4,399.0	4,339.9	15.6	14.5	-126.05	-320.7	620.8	128.8	102.2	26.60	4.843		
4,500.0	4,427.6	4,499.0	4,438.4	15.9	14.8	-125.84	-328.9	636.1	131.4	104.1	27.28	4.816		
4,600.0	4,525.9	4,599.0	4,536.8	16.3	15.2	-125.63	-337.1	651.5	133.9	106.0	27.96	4.790		
4,700.0	4,624.2	4,698.9	4,635.3	16.7	15.5	-125.44	-345.3	666.8	136.5	107.8	28.64	4.765		
4,800.0	4,722.5	4,798.9	4,733.7	17.0	15.9	-125.25	-353.6	682.2	139.0	109.7	29.32	4.742		
4,900.0	4,820.8	4,898.9	4,832.1	17.4	16.2	-125.07	-361.8	697.5	141.6	111.6	30.00	4.719		
5,000.0	4,919.1	4,998.8	4,930.6	17.8	16.6	-124.89	-370.0	712.9	144.1	113.5	30.68	4.698		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-6D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,017.4	5,098.8	5,029.0	18.1	16.9	-124.73	-378.2	728.2	146.7	115.3	31.36	4.677		
5,200.0	5,115.7	5,198.8	5,127.4	18.5	17.3	-124.56	-386.4	743.6	149.2	117.2	32.04	4.658		
5,300.0	5,214.0	5,298.7	5,225.9	18.9	17.7	-124.40	-394.7	758.9	151.8	119.1	32.72	4.639		
5,400.0	5,312.3	5,398.7	5,324.3	19.2	18.0	-124.25	-402.9	774.3	154.4	121.0	33.40	4.621		
5,500.0	5,410.6	5,498.7	5,422.8	19.6	18.4	-124.10	-411.1	789.6	156.9	122.8	34.08	4.604		
5,600.0	5,508.9	5,598.6	5,521.2	20.0	18.7	-123.96	-419.3	805.0	159.5	124.7	34.76	4.588		
5,700.0	5,607.2	5,698.6	5,619.6	20.3	19.1	-123.82	-427.5	820.3	162.0	126.6	35.44	4.572		
5,800.0	5,705.5	5,798.6	5,718.1	20.7	19.4	-123.69	-435.7	835.7	164.6	128.5	36.12	4.557		
5,900.0	5,803.8	5,898.5	5,816.5	21.1	19.8	-123.56	-444.0	851.0	167.2	130.4	36.80	4.542		
6,000.0	5,902.1	5,998.1	5,914.6	21.4	20.1	-123.44	-452.1	866.3	169.7	132.3	37.48	4.529 SF		
6,100.0	6,000.4	6,095.5	6,010.8	21.8	20.4	-123.36	-459.2	879.4	173.3	135.3	37.93	4.567		
6,200.0	6,098.7	6,192.6	6,107.2	22.2	20.6	-125.40	-464.6	889.6	178.3	140.3	38.08	4.683		
6,300.0	6,197.0	6,289.1	6,203.4	22.6	20.8	-127.63	-468.5	896.9	185.2	147.3	37.93	4.883		
6,400.0	6,295.3	6,384.9	6,299.0	22.9	21.0	-130.50	-470.9	901.3	194.2	156.7	37.49	5.179		
6,500.0	6,393.6	6,479.7	6,393.8	23.3	21.1	-133.80	-471.7	902.8	205.5	168.7	36.81	5.584		
6,600.0	6,491.9	6,578.0	6,492.2	23.7	21.2	-137.29	-471.8	902.7	218.7	182.7	35.98	6.077		
6,700.0	6,590.2	6,676.6	6,590.7	24.0	21.2	-140.49	-472.1	902.1	232.4	197.2	35.20	6.604		
6,800.0	6,688.5	6,774.9	6,689.0	24.4	21.3	-143.41	-472.6	901.3	246.8	212.3	34.48	7.158		
6,900.0	6,786.8	6,873.2	6,787.3	24.8	21.4	-146.05	-473.1	900.4	261.4	227.6	33.83	7.728		
7,000.0	6,885.6	6,971.9	6,886.0	25.0	21.5	-148.20	-473.6	899.5	274.3	240.9	33.34	8.225		
7,100.0	6,984.9	7,071.1	6,985.2	25.3	21.6	-149.78	-474.2	898.5	284.4	251.3	33.04	8.608		
7,200.0	7,084.5	7,170.7	7,084.8	25.5	21.7	-150.89	-474.7	897.6	291.6	258.8	32.88	8.869		
7,300.0	7,184.4	7,270.6	7,184.7	25.6	21.8	-151.61	-475.2	896.7	295.9	263.1	32.85	9.008		
7,400.0	7,284.4	7,370.5	7,284.6	25.7	21.9	93.91	-475.8	895.7	297.2	264.2	32.93	9.024		
7,500.0	7,384.4	7,470.5	7,384.6	25.8	22.0	93.75	-476.3	894.8	297.1	264.0	33.13	8.968		
7,600.0	7,484.4	7,570.5	7,484.6	25.9	22.1	93.68	-476.9	893.9	297.1	263.7	33.36	8.906		
7,640.4	7,524.8	7,610.9	7,525.0	25.9	22.1	93.67	-477.1	893.5	297.1	263.6	33.45	8.880		
7,700.0	7,584.4	7,670.5	7,584.6	25.9	22.2	93.69	-477.4	892.9	297.1	263.5	33.61	8.839		
7,800.0	7,684.4	7,770.5	7,684.6	26.0	22.3	93.75	-477.9	892.0	297.1	263.2	33.89	8.767		
7,900.0	7,784.4	7,870.5	7,784.6	26.1	22.4	93.82	-478.5	891.1	297.1	263.0	34.17	8.696		
8,000.0	7,884.4	7,970.5	7,884.6	26.2	22.5	93.89	-479.0	890.2	297.1	262.7	34.45	8.626		
8,100.0	7,984.4	8,070.5	7,984.6	26.3	22.6	93.96	-479.5	889.2	297.2	262.4	34.73	8.557		
8,200.0	8,084.3	8,170.5	8,084.6	26.4	22.7	94.03	-480.1	888.3	297.2	262.2	35.01	8.489		
8,300.0	8,184.3	8,270.5	8,184.6	26.5	22.8	94.10	-480.6	887.4	297.2	261.9	35.29	8.421		
8,400.0	8,284.3	8,370.5	8,284.6	26.5	22.9	94.17	-481.2	886.4	297.2	261.7	35.58	8.354		
8,500.0	8,384.3	8,470.5	8,384.5	26.6	23.0	94.24	-481.7	885.5	297.3	261.4	35.87	8.288		
8,600.0	8,484.3	8,570.5	8,484.5	26.7	23.1	94.31	-482.2	884.6	297.3	261.1	36.15	8.223		
8,700.0	8,584.3	8,670.5	8,584.5	26.8	23.2	94.38	-482.8	883.6	297.3	260.9	36.44	8.159		
8,800.0	8,684.3	8,770.5	8,684.5	26.9	23.3	94.45	-483.3	882.7	297.4	260.6	36.73	8.096		
8,900.0	8,784.3	8,870.5	8,784.5	27.0	23.4	94.52	-483.8	881.8	297.4	260.4	37.02	8.033		
9,000.0	8,884.3	8,970.5	8,884.5	27.1	23.5	94.59	-484.4	880.8	297.4	260.1	37.31	7.971		
9,100.0	8,984.2	9,070.5	8,984.5	27.2	23.6	94.66	-484.9	879.9	297.4	259.8	37.60	7.910		
9,200.0	9,084.2	9,170.5	9,084.5	27.3	23.7	94.73	-485.5	879.0	297.5	259.6	37.90	7.849		
9,300.0	9,184.2	9,270.5	9,184.5	27.4	23.8	94.80	-486.0	878.1	297.5	259.3	38.19	7.790		
9,400.0	9,284.2	9,370.5	9,284.5	27.5	23.9	94.87	-486.5	877.1	297.5	259.0	38.49	7.731		
9,500.0	9,384.2	9,470.5	9,384.5	27.6	24.1	94.94	-487.1	876.2	297.6	258.8	38.78	7.673		
9,600.0	9,484.2	9,570.5	9,484.5	27.7	24.2	95.01	-487.6	875.3	297.6	258.5	39.08	7.615		
9,700.0	9,584.2	9,670.5	9,584.5	27.8	24.3	95.08	-488.1	874.3	297.6	258.2	39.38	7.558		
9,800.0	9,684.2	9,770.5	9,684.5	27.9	24.4	95.15	-488.7	873.4	297.7	258.0	39.68	7.502		
9,900.0	9,784.2	9,870.5	9,784.5	28.0	24.5	95.21	-489.2	872.5	297.7	257.7	39.97	7.447		
10,000.0	9,884.2	9,970.5	9,884.5	28.1	24.6	95.28	-489.8	871.5	297.7	257.4	40.27	7.392		
10,100.0	9,984.1	10,070.5	9,984.4	28.2	24.7	95.35	-490.3	870.6	297.8	257.2	40.58	7.338		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-6D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						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		
10,200.0	10,084.1	10,170.5	10,084.4	28.3	24.9	95.42	-490.8	869.7	297.8	256.9	40.88	7.285		
10,300.0	10,184.1	10,270.5	10,184.4	28.4	25.0	95.49	-491.4	868.7	297.8	256.6	41.18	7.232		
10,342.9	10,227.0	10,313.4	10,227.3	28.4	25.0	95.52	-491.6	868.3	297.8	256.5	41.31	7.210		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-7D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	73.91	8.4	29.0	30.2					
100.0	100.0	100.0	100.0	0.1	0.1	73.91	8.4	29.0	30.2	29.9	0.28	108.238		
200.0	200.0	200.0	200.0	0.3	0.3	73.91	8.4	29.0	30.2	29.6	0.63	48.106		
300.0	298.9	298.3	298.3	0.6	0.5	-75.00	8.1	30.7	25.5	24.4	1.04	24.397		
322.1	320.6	320.1	320.0	0.6	0.5	-82.42	8.0	31.5	25.2	24.0	1.16	21.713 CC, ES		
400.0	397.2	396.9	396.8	0.9	0.7	-104.68	7.4	35.7	27.9	26.4	1.56	17.888		
500.0	495.5	496.2	495.7	1.2	0.9	-119.90	6.2	44.2	35.8	33.8	2.06	17.381		
600.0	593.8	595.9	594.6	1.6	1.2	-124.92	4.5	56.1	44.7	42.1	2.60	17.183		
700.0	692.1	695.7	693.2	2.0	1.5	-124.57	2.4	71.4	53.3	50.1	3.24	16.487		
800.0	790.4	795.4	791.4	2.3	1.8	-122.49	-0.1	88.6	61.7	57.8	3.91	15.787		
900.0	888.7	895.0	889.5	2.7	2.2	-120.90	-2.5	105.9	70.2	65.6	4.60	15.272		
1,000.0	987.0	994.6	987.5	3.1	2.5	-119.66	-5.0	123.1	78.7	73.4	5.29	14.883		
1,100.0	1,085.3	1,094.2	1,085.6	3.4	2.8	-118.65	-7.4	140.3	87.2	81.2	5.98	14.580		
1,200.0	1,183.6	1,193.9	1,183.7	3.8	3.2	-117.83	-9.9	157.5	95.7	89.1	6.68	14.339		
1,300.0	1,281.9	1,293.5	1,281.8	4.2	3.5	-117.14	-12.3	174.8	104.3	96.9	7.37	14.143		
1,400.0	1,380.2	1,393.1	1,379.9	4.5	3.9	-116.55	-14.8	192.0	112.9	104.8	8.07	13.981		
1,500.0	1,478.5	1,492.7	1,478.0	4.9	4.2	-116.05	-17.2	209.2	121.4	112.7	8.77	13.845		
1,600.0	1,576.8	1,592.4	1,576.1	5.3	4.6	-115.61	-19.7	226.5	130.0	120.6	9.47	13.728		
1,700.0	1,675.1	1,692.0	1,674.2	5.6	4.9	-115.23	-22.1	243.7	138.6	128.5	10.17	13.628		
1,800.0	1,773.4	1,791.6	1,772.3	6.0	5.3	-114.89	-24.6	260.9	147.2	136.4	10.87	13.541		
1,900.0	1,871.7	1,891.2	1,870.4	6.4	5.6	-114.59	-27.0	278.2	155.8	144.3	11.57	13.465		
2,000.0	1,970.0	1,990.9	1,968.5	6.7	6.0	-114.33	-29.5	295.4	164.4	152.2	12.27	13.397		
2,100.0	2,068.3	2,090.5	2,066.6	7.1	6.4	-114.08	-31.9	312.6	173.1	160.1	12.98	13.337		
2,200.0	2,166.6	2,190.1	2,164.7	7.5	6.7	-113.86	-34.4	329.9	181.7	168.0	13.68	13.283		
2,300.0	2,264.9	2,289.7	2,262.8	7.8	7.1	-113.67	-36.8	347.1	190.3	175.9	14.38	13.235		
2,400.0	2,363.2	2,389.4	2,360.9	8.2	7.4	-113.48	-39.3	364.3	198.9	183.8	15.08	13.191		
2,500.0	2,461.5	2,489.0	2,459.0	8.6	7.8	-113.32	-41.7	381.5	207.5	191.8	15.78	13.151		
2,600.0	2,559.8	2,588.6	2,557.0	8.9	8.1	-113.16	-44.2	398.8	216.2	199.7	16.48	13.114		
2,700.0	2,658.1	2,688.3	2,655.1	9.3	8.5	-113.02	-46.6	416.0	224.8	207.6	17.18	13.081		
2,800.0	2,756.4	2,787.9	2,753.2	9.7	8.8	-112.89	-49.1	433.2	233.4	215.5	17.89	13.050		
2,900.0	2,854.7	2,887.5	2,851.3	10.0	9.2	-112.77	-51.5	450.5	242.0	223.5	18.59	13.021		
3,000.0	2,953.0	2,987.1	2,949.4	10.4	9.5	-112.66	-54.0	467.7	250.7	231.4	19.29	12.995		
3,100.0	3,051.3	3,086.8	3,047.5	10.8	9.9	-112.55	-56.4	484.9	259.3	239.3	19.99	12.971		
3,200.0	3,149.6	3,186.4	3,145.6	11.1	10.2	-112.45	-58.9	502.2	267.9	247.2	20.69	12.948		
3,300.0	3,247.9	3,286.0	3,243.7	11.5	10.6	-112.36	-61.3	519.4	276.6	255.2	21.40	12.927		
3,400.0	3,346.2	3,385.6	3,341.8	11.9	10.9	-112.27	-63.8	536.6	285.2	263.1	22.10	12.907		
3,500.0	3,444.5	3,485.3	3,439.9	12.3	11.3	-112.19	-66.2	553.9	293.8	271.0	22.80	12.888		
3,600.0	3,542.8	3,584.9	3,538.0	12.6	11.6	-112.11	-68.7	571.1	302.5	279.0	23.50	12.871		
3,700.0	3,641.1	3,684.5	3,636.1	13.0	12.0	-112.04	-71.1	588.3	311.1	286.9	24.20	12.854		
3,800.0	3,739.4	3,784.1	3,734.2	13.4	12.4	-111.97	-73.6	605.5	319.7	294.8	24.90	12.839		
3,900.0	3,837.7	3,883.8	3,832.3	13.7	12.7	-111.90	-76.0	622.8	328.4	302.8	25.61	12.824		
4,000.0	3,936.0	3,983.4	3,930.4	14.1	13.1	-111.84	-78.4	640.0	337.0	310.7	26.31	12.810		
4,100.0	4,034.3	4,083.0	4,028.5	14.5	13.4	-111.78	-80.9	657.2	345.6	318.6	27.01	12.797		
4,200.0	4,132.6	4,182.6	4,126.6	14.8	13.8	-111.72	-83.3	674.5	354.3	326.6	27.71	12.784		
4,300.0	4,231.0	4,282.3	4,224.6	15.2	14.1	-111.67	-85.8	691.7	362.9	334.5	28.41	12.772		
4,400.0	4,329.3	4,381.9	4,322.7	15.6	14.5	-111.62	-88.2	708.9	371.5	342.4	29.12	12.761		
4,500.0	4,427.6	4,481.5	4,420.8	15.9	14.8	-111.57	-90.7	726.2	380.2	350.4	29.82	12.750		
4,600.0	4,525.9	4,581.1	4,518.9	16.3	15.2	-111.52	-93.1	743.4	388.8	358.3	30.52	12.740		
4,700.0	4,624.2	4,680.8	4,617.0	16.7	15.5	-111.48	-95.6	760.6	397.5	366.2	31.22	12.730		
4,800.0	4,722.5	4,780.4	4,715.1	17.0	15.9	-111.44	-98.0	777.9	406.1	374.2	31.92	12.721		
4,900.0	4,820.8	4,880.0	4,813.2	17.4	16.2	-111.40	-100.5	795.1	414.7	382.1	32.62	12.712		
5,000.0	4,919.1	4,979.6	4,911.3	17.8	16.6	-111.36	-102.9	812.3	423.4	390.0	33.33	12.704		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-7D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,017.4	5,079.3	5,009.4	18.1	17.0	-111.32	-105.4	829.5	432.0	398.0	34.03	12.695		
5,200.0	5,115.7	5,178.9	5,107.5	18.5	17.3	-111.28	-107.8	846.8	440.6	405.9	34.73	12.688		
5,300.0	5,214.0	5,278.5	5,205.6	18.9	17.7	-111.25	-110.3	864.0	449.3	413.9	35.43	12.680		
5,400.0	5,312.3	5,378.1	5,303.7	19.2	18.0	-111.22	-112.7	881.2	457.9	421.8	36.13	12.673		
5,500.0	5,410.6	5,477.8	5,401.8	19.6	18.4	-111.18	-115.2	898.5	466.6	429.7	36.84	12.666 SF		
5,600.0	5,508.9	5,579.2	5,502.0	20.0	18.7	-111.38	-117.4	914.2	475.0	437.5	37.47	12.676		
5,700.0	5,607.2	5,680.5	5,602.4	20.3	18.9	-111.99	-119.1	926.4	483.1	445.1	38.02	12.705		
5,800.0	5,705.5	5,781.3	5,702.9	20.7	19.1	-112.99	-120.4	935.0	491.0	452.5	38.48	12.758		
5,900.0	5,803.8	5,881.4	5,802.9	21.1	19.3	-114.35	-121.1	940.1	498.8	459.9	38.84	12.841		
6,000.0	5,902.1	5,980.7	5,902.1	21.4	19.4	-116.05	-121.3	941.7	506.8	467.7	39.10	12.961		
6,100.0	6,000.4	6,080.3	6,001.8	21.8	19.4	-117.91	-121.4	941.5	515.1	475.8	39.29	13.108		
6,200.0	6,098.7	6,179.9	6,101.4	22.2	19.5	-119.74	-121.8	940.9	523.6	484.2	39.45	13.273		
6,300.0	6,197.0	6,278.3	6,199.8	22.6	19.6	-121.51	-122.2	940.1	532.6	493.0	39.58	13.455		
6,400.0	6,295.3	6,376.5	6,298.0	22.9	19.7	-123.22	-122.7	939.3	542.0	502.3	39.69	13.655		
6,500.0	6,393.6	6,474.8	6,396.2	23.3	19.8	-124.88	-123.1	938.5	551.9	512.1	39.78	13.873		
6,600.0	6,491.9	6,573.0	6,494.4	23.7	19.9	-126.47	-123.6	937.7	562.3	522.4	39.86	14.107		
6,700.0	6,590.2	6,671.2	6,592.7	24.0	20.0	-128.01	-124.1	936.9	573.1	533.1	39.92	14.355		
6,800.0	6,688.5	6,769.5	6,690.9	24.4	20.1	-129.49	-124.5	936.1	584.2	544.3	39.97	14.617		
6,900.0	6,786.8	6,867.7	6,789.1	24.8	20.1	-130.97	-125.0	935.3	595.7	555.7	40.01	14.888		
7,000.0	6,885.6	6,966.5	6,887.9	25.0	20.2	-132.29	-125.4	934.5	606.6	565.5	40.04	15.125		
7,100.0	6,984.9	7,065.7	6,987.1	25.3	20.3	-133.30	-125.9	933.7	613.3	573.3	40.09	15.299		
7,200.0	7,084.5	7,165.3	7,086.7	25.5	20.4	-134.03	-126.4	932.9	618.8	578.7	40.17	15.405		
7,300.0	7,184.4	7,265.1	7,186.5	25.6	20.5	-134.48	-126.8	932.1	622.0	581.7	40.28	15.442		
7,400.0	7,284.4	7,365.1	7,286.5	25.7	20.6	-111.20	-127.3	931.3	622.7	582.3	40.42	15.405		
7,500.0	7,384.4	7,465.1	7,386.5	25.8	20.7	-111.15	-127.8	930.5	622.4	581.8	40.61	15.326		
7,600.0	7,484.4	7,565.1	7,486.5	25.9	20.8	-111.12	-128.3	929.7	622.3	581.5	40.81	15.250		
7,607.5	7,491.9	7,572.6	7,494.0	25.9	20.8	-111.12	-128.3	929.6	622.3	581.5	40.82	15.244		
7,700.0	7,584.4	7,665.1	7,586.5	25.9	20.9	-111.14	-128.7	928.9	622.4	581.4	41.01	15.176		
7,800.0	7,684.4	7,765.1	7,686.5	26.0	21.0	-111.18	-129.2	928.1	622.6	581.4	41.22	15.102		
7,900.0	7,784.4	7,865.1	7,786.5	26.1	21.1	-111.22	-129.7	927.2	622.8	581.3	41.44	15.029		
8,000.0	7,884.4	7,965.1	7,886.5	26.2	21.2	-111.27	-130.1	926.4	623.0	581.3	41.65	14.956		
8,100.0	7,984.4	8,065.1	7,986.5	26.3	21.3	-111.31	-130.6	925.6	623.1	581.3	41.87	14.883		
8,200.0	8,084.3	8,165.1	8,086.5	26.4	21.4	-111.35	-131.1	924.8	623.3	581.2	42.09	14.810		
8,300.0	8,184.3	8,265.1	8,186.5	26.5	21.6	-111.40	-131.5	924.0	623.5	581.2	42.31	14.737		
8,400.0	8,284.3	8,365.1	8,286.5	26.5	21.7	-111.44	-132.0	923.2	623.7	581.1	42.53	14.664		
8,500.0	8,384.3	8,465.1	8,386.5	26.6	21.8	-111.48	-132.5	922.4	623.9	581.1	42.75	14.592		
8,600.0	8,484.3	8,565.1	8,486.4	26.7	21.9	-111.52	-132.9	921.6	624.0	581.1	42.98	14.519		
8,700.0	8,584.3	8,665.1	8,586.4	26.8	22.0	-111.57	-133.4	920.8	624.2	581.0	43.21	14.447		
8,800.0	8,684.3	8,765.1	8,686.4	26.9	22.1	-111.61	-133.9	919.9	624.4	581.0	43.44	14.375		
8,900.0	8,784.3	8,865.1	8,786.4	27.0	22.2	-111.65	-134.3	919.1	624.6	580.9	43.67	14.304		
9,000.0	8,884.3	8,965.1	8,886.4	27.1	22.3	-111.69	-134.8	918.3	624.8	580.9	43.90	14.232		
9,100.0	8,984.2	9,065.1	8,986.4	27.2	22.4	-111.74	-135.3	917.5	625.0	580.8	44.13	14.161		
9,200.0	9,084.2	9,165.1	9,086.4	27.3	22.6	-111.78	-135.7	916.7	625.2	580.8	44.37	14.090		
9,300.0	9,184.2	9,265.1	9,186.4	27.4	22.7	-111.82	-136.2	915.9	625.3	580.7	44.60	14.020		
9,400.0	9,284.2	9,365.1	9,286.4	27.5	22.8	-111.86	-136.7	915.1	625.5	580.7	44.84	13.950		
9,500.0	9,384.2	9,465.1	9,386.4	27.6	22.9	-111.91	-137.2	914.3	625.7	580.6	45.08	13.880		
9,600.0	9,484.2	9,565.1	9,486.4	27.7	23.0	-111.95	-137.6	913.4	625.9	580.6	45.32	13.810		
9,700.0	9,584.2	9,665.1	9,586.4	27.8	23.1	-111.99	-138.1	912.6	626.1	580.5	45.56	13.741		
9,800.0	9,684.2	9,765.1	9,686.4	27.9	23.3	-112.03	-138.6	911.8	626.3	580.5	45.81	13.672		
9,900.0	9,784.2	9,865.1	9,786.4	28.0	23.4	-112.08	-139.0	911.0	626.5	580.4	46.05	13.603		
10,000.0	9,884.2	9,965.1	9,886.4	28.1	23.5	-112.12	-139.5	910.2	626.6	580.3	46.30	13.535		
10,100.0	9,984.1	10,065.1	9,986.4	28.2	23.6	-112.16	-140.0	909.4	626.8	580.3	46.55	13.467		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design													Chevron E05 696 - Chevron 5-7D - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program:													0-MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							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						
10,200.0	10,084.1	10,165.1	10,086.4	28.3	23.7	112.20	-140.4	908.6	627.0	580.2	46.80	13.399						
10,300.0	10,184.1	10,265.1	10,186.3	28.4	23.9	112.25	-140.9	907.8	627.2	580.2	47.05	13.332						
10,342.9	10,227.0	10,308.0	10,229.2	28.4	23.9	112.26	-141.1	907.4	627.3	580.1	47.15	13.303						

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-8D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	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	74.08	12.4	43.4	45.2					
100.0	100.0	100.0	100.0	0.1	0.1	74.08	12.4	43.4	45.2	44.9	0.28	161.697		
200.0	200.0	200.0	200.0	0.3	0.3	74.08	12.4	43.4	45.2	44.5	0.63	71.865		
300.0	298.9	297.6	297.6	0.6	0.5	-67.15	12.7	45.0	39.9	38.9	1.03	38.546		
342.2	340.3	338.7	338.7	0.7	0.6	-76.60	13.1	46.7	39.1	37.8	1.25	31.183 CC, ES		
400.0	397.2	395.3	395.1	0.9	0.7	-88.79	13.8	49.9	40.5	38.9	1.56	25.970		
500.0	495.5	493.3	492.8	1.2	0.9	-103.95	15.6	58.1	48.3	46.2	2.10	22.990		
600.0	593.8	591.4	590.2	1.6	1.2	-111.49	18.1	69.5	60.0	57.4	2.67	22.518		
700.0	692.1	689.5	687.1	2.0	1.5	-114.08	21.3	84.2	73.7	70.4	3.28	22.474		
800.0	790.4	788.3	784.4	2.3	1.8	-114.59	24.9	101.0	88.3	84.4	3.92	22.523		
900.0	888.7	887.2	881.8	2.7	2.1	-114.94	28.6	117.9	102.9	98.3	4.57	22.517		
1,000.0	987.0	986.2	979.2	3.1	2.5	-115.20	32.3	134.7	117.4	112.2	5.22	22.490		
1,100.0	1,085.3	1,085.1	1,076.7	3.4	2.8	-115.41	36.0	151.6	132.0	126.2	5.88	22.457		
1,200.0	1,183.6	1,184.0	1,174.1	3.8	3.2	-115.57	39.6	168.4	146.6	140.1	6.54	22.422		
1,300.0	1,281.9	1,283.0	1,271.5	4.2	3.5	-115.70	43.3	185.3	161.2	154.0	7.20	22.389		
1,400.0	1,380.2	1,381.9	1,368.9	4.5	3.8	-115.82	47.0	202.2	175.8	168.0	7.86	22.359		
1,500.0	1,478.5	1,480.8	1,466.3	4.9	4.2	-115.91	50.7	219.0	190.4	181.9	8.53	22.330		
1,600.0	1,576.8	1,579.7	1,563.7	5.3	4.5	-115.99	54.3	235.9	205.0	195.8	9.19	22.304		
1,700.0	1,675.1	1,678.7	1,661.1	5.6	4.9	-116.06	58.0	252.7	219.6	209.7	9.86	22.281		
1,800.0	1,773.4	1,777.6	1,758.5	6.0	5.2	-116.12	61.7	269.6	234.2	223.7	10.52	22.259		
1,900.0	1,871.7	1,876.5	1,856.0	6.4	5.6	-116.18	65.4	286.5	248.8	237.6	11.19	22.239		
2,000.0	1,970.0	1,975.5	1,953.4	6.7	5.9	-116.23	69.0	303.3	263.4	251.5	11.85	22.221		
2,100.0	2,068.3	2,074.4	2,050.8	7.1	6.3	-116.27	72.7	320.2	278.0	265.5	12.52	22.205		
2,200.0	2,166.6	2,173.3	2,148.2	7.5	6.6	-116.31	76.4	337.1	292.6	279.4	13.19	22.189		
2,300.0	2,264.9	2,272.2	2,245.6	7.8	7.0	-116.35	80.0	353.9	307.2	293.3	13.85	22.175		
2,400.0	2,363.2	2,371.2	2,343.0	8.2	7.3	-116.38	83.7	370.8	321.8	307.3	14.52	22.162		
2,500.0	2,461.5	2,470.1	2,440.4	8.6	7.7	-116.41	87.4	387.6	336.4	321.2	15.19	22.150		
2,600.0	2,559.8	2,569.0	2,537.8	8.9	8.0	-116.43	91.1	404.5	351.0	335.1	15.85	22.139		
2,700.0	2,658.1	2,668.0	2,635.2	9.3	8.4	-116.46	94.7	421.4	365.6	349.0	16.52	22.129		
2,800.0	2,756.4	2,766.9	2,732.7	9.7	8.7	-116.48	98.4	438.2	380.2	363.0	17.19	22.119		
2,900.0	2,854.7	2,865.8	2,830.1	10.0	9.1	-116.50	102.1	455.1	394.8	376.9	17.85	22.110		
3,000.0	2,953.0	2,964.7	2,927.5	10.4	9.4	-116.52	105.8	471.9	409.4	390.8	18.52	22.101		
3,100.0	3,051.3	3,063.7	3,024.9	10.8	9.8	-116.54	109.4	488.8	424.0	404.8	19.19	22.093		
3,200.0	3,149.6	3,162.6	3,122.3	11.1	10.1	-116.56	113.1	505.7	438.6	418.7	19.86	22.086		
3,300.0	3,247.9	3,261.5	3,219.7	11.5	10.5	-116.57	116.8	522.5	453.2	432.6	20.52	22.078		
3,400.0	3,346.2	3,360.5	3,317.1	11.9	10.8	-116.59	120.5	539.4	467.8	446.6	21.19	22.072		
3,500.0	3,444.5	3,459.4	3,414.5	12.3	11.2	-116.60	124.1	556.2	482.3	460.5	21.86	22.065		
3,600.0	3,542.8	3,558.3	3,512.0	12.6	11.5	-116.62	127.8	573.1	496.9	474.4	22.53	22.059		
3,700.0	3,641.1	3,657.2	3,609.4	13.0	11.9	-116.63	131.5	590.0	511.5	488.3	23.20	22.054		
3,800.0	3,739.4	3,756.2	3,706.8	13.4	12.2	-116.64	135.2	606.8	526.1	502.3	23.86	22.048		
3,900.0	3,837.7	3,855.1	3,804.2	13.7	12.6	-116.65	138.8	623.7	540.7	516.2	24.53	22.043		
4,000.0	3,936.0	3,954.0	3,901.6	14.1	12.9	-116.66	142.5	640.6	555.3	530.1	25.20	22.038		
4,100.0	4,034.3	4,053.0	3,999.0	14.5	13.3	-116.67	146.2	657.4	569.9	544.1	25.87	22.034		
4,200.0	4,132.6	4,151.9	4,096.4	14.8	13.6	-116.68	149.9	674.3	584.5	558.0	26.53	22.029		
4,300.0	4,231.0	4,250.8	4,193.8	15.2	14.0	-116.69	153.5	691.1	599.1	571.9	27.20	22.025		
4,400.0	4,329.3	4,349.7	4,291.3	15.6	14.3	-116.70	157.2	708.0	613.7	585.9	27.87	22.021		
4,500.0	4,427.6	4,448.7	4,388.7	15.9	14.7	-116.71	160.9	724.9	628.3	599.8	28.54	22.017		
4,600.0	4,525.9	4,547.6	4,486.1	16.3	15.0	-116.72	164.6	741.7	642.9	613.7	29.21	22.013		
4,700.0	4,624.2	4,646.5	4,583.5	16.7	15.4	-116.72	168.2	758.6	657.5	627.6	29.87	22.010		
4,800.0	4,722.5	4,745.5	4,680.9	17.0	15.7	-116.73	171.9	775.4	672.1	641.6	30.54	22.006		
4,900.0	4,820.8	4,844.4	4,778.3	17.4	16.1	-116.74	175.6	792.3	686.7	655.5	31.21	22.003		
5,000.0	4,919.1	4,943.3	4,875.7	17.8	16.4	-116.74	179.3	809.2	701.3	669.4	31.88	22.000		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-8D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,017.4	5,042.2	4,973.1	18.1	16.8	-116.75	182.9	826.0	715.9	683.4	32.55	21.997		
5,200.0	5,115.7	5,141.2	5,070.5	18.5	17.1	-116.76	186.6	842.9	730.5	697.3	33.21	21.994		
5,300.0	5,214.0	5,240.1	5,168.0	18.9	17.5	-116.76	190.3	859.7	745.1	711.2	33.88	21.991		
5,400.0	5,312.3	5,339.0	5,265.4	19.2	17.8	-116.77	193.9	876.6	759.7	725.2	34.55	21.988		
5,500.0	5,410.6	5,438.0	5,362.8	19.6	18.2	-116.77	197.6	893.5	774.3	739.1	35.22	21.986		
5,600.0	5,508.9	5,543.4	5,466.8	20.0	18.5	-116.83	201.4	910.7	788.6	752.8	35.88	21.982		
5,700.0	5,607.2	5,653.2	5,575.6	20.3	18.8	-117.15	204.5	924.9	801.8	765.3	36.48	21.979		
5,800.0	5,705.5	5,762.8	5,684.7	20.7	19.1	-117.74	206.7	935.0	813.6	776.6	37.01	21.983		
5,900.0	5,803.8	5,872.1	5,793.8	21.1	19.2	-118.58	208.0	940.9	824.3	786.8	37.47	22.000		
6,000.0	5,902.1	5,980.4	5,902.1	21.4	19.3	-119.66	208.4	942.9	833.9	796.0	37.85	22.031		
6,100.0	6,000.4	6,080.9	6,002.5	21.8	19.4	-120.76	208.3	942.7	843.1	804.9	38.20	22.073		
6,200.0	6,098.7	6,181.2	6,102.9	22.2	19.5	-121.87	207.9	942.1	852.4	813.9	38.52	22.126		
6,300.0	6,197.0	6,279.6	6,201.3	22.6	19.6	-122.95	207.5	941.3	861.8	823.0	38.84	22.191		
6,400.0	6,295.3	6,377.9	6,299.5	22.9	19.7	-124.00	207.0	940.5	871.6	832.5	39.14	22.270		
6,500.0	6,393.6	6,476.1	6,397.8	23.3	19.8	-125.02	206.6	939.7	881.6	842.2	39.43	22.360		
6,600.0	6,491.9	6,574.3	6,496.0	23.7	19.8	-126.03	206.1	938.9	891.9	852.2	39.71	22.462		
6,700.0	6,590.2	6,672.6	6,594.2	24.0	19.9	-127.01	205.6	938.1	902.5	862.5	39.98	22.574		
6,800.0	6,688.5	6,770.8	6,692.4	24.4	20.0	-127.97	205.2	937.3	913.4	873.1	40.24	22.697		
6,900.0	6,786.8	6,869.1	6,790.7	24.8	20.1	-128.95	204.7	936.5	924.3	883.8	40.50	22.822		
7,000.0	6,885.6	6,967.8	6,889.4	25.0	20.2	-129.88	204.3	935.7	933.8	893.0	40.74	22.920		
7,100.0	6,984.9	7,067.0	6,988.7	25.3	20.3	-130.60	203.8	934.9	941.1	900.1	40.96	22.978		
7,200.0	7,084.5	7,166.6	7,088.3	25.5	20.4	-131.11	203.3	934.1	946.3	905.1	41.16	22.992		
7,300.0	7,184.4	7,266.5	7,188.1	25.6	20.5	-131.43	202.9	933.3	949.1	907.8	41.34	22.959		
7,400.0	7,284.4	7,366.4	7,288.1	25.7	20.6	-114.31	202.4	932.5	949.8	908.2	41.52	22.877		
7,500.0	7,384.4	7,466.4	7,388.1	25.8	20.7	-114.28	201.9	931.7	949.5	907.8	41.71	22.764		
7,600.0	7,484.4	7,566.4	7,488.1	25.9	20.8	-114.26	201.5	930.9	949.4	907.5	41.90	22.656		
7,607.3	7,491.7	7,573.7	7,495.3	25.9	20.8	-114.26	201.4	930.8	949.4	907.4	41.92	22.648		
7,700.0	7,584.4	7,666.4	7,588.0	25.9	20.9	-114.27	201.0	930.1	949.4	907.3	42.10	22.552		
7,800.0	7,684.4	7,766.4	7,688.0	26.0	21.0	-114.30	200.5	929.3	949.6	907.3	42.30	22.451		
7,900.0	7,784.4	7,866.4	7,788.0	26.1	21.1	-114.33	200.1	928.5	949.9	907.4	42.50	22.350		
8,000.0	7,884.4	7,966.4	7,888.0	26.2	21.2	-114.35	199.6	927.6	950.1	907.4	42.70	22.249		
8,100.0	7,984.4	8,066.4	7,988.0	26.3	21.3	-114.38	199.1	926.8	950.3	907.4	42.91	22.147		
8,200.0	8,084.3	8,166.4	8,088.0	26.4	21.4	-114.41	198.7	926.0	950.5	907.4	43.11	22.046		
8,300.0	8,184.3	8,266.4	8,188.0	26.5	21.5	-114.44	198.2	925.2	950.7	907.4	43.32	21.945		
8,400.0	8,284.3	8,366.4	8,288.0	26.5	21.6	-114.46	197.7	924.4	950.9	907.4	43.53	21.844		
8,500.0	8,384.3	8,466.4	8,388.0	26.6	21.7	-114.49	197.2	923.6	951.1	907.3	43.74	21.742		
8,600.0	8,484.3	8,566.4	8,488.0	26.7	21.8	-114.52	196.8	922.8	951.3	907.3	43.96	21.641		
8,700.0	8,584.3	8,666.4	8,588.0	26.8	21.9	-114.55	196.3	922.0	951.5	907.3	44.17	21.541		
8,800.0	8,684.3	8,766.4	8,688.0	26.9	22.0	-114.57	195.8	921.2	951.7	907.3	44.39	21.440		
8,900.0	8,784.3	8,866.4	8,788.0	27.0	22.1	-114.60	195.4	920.4	951.9	907.3	44.61	21.339		
9,000.0	8,884.3	8,966.4	8,888.0	27.1	22.2	-114.63	194.9	919.5	952.1	907.3	44.83	21.239		
9,100.0	8,984.2	9,066.4	8,988.0	27.2	22.4	-114.66	194.4	918.7	952.3	907.3	45.05	21.139		
9,200.0	9,084.2	9,166.4	9,088.0	27.3	22.5	-114.68	194.0	917.9	952.5	907.3	45.28	21.039		
9,300.0	9,184.2	9,266.4	9,188.0	27.4	22.6	-114.71	193.5	917.1	952.8	907.3	45.50	20.939		
9,400.0	9,284.2	9,366.4	9,288.0	27.5	22.7	-114.74	193.0	916.3	953.0	907.2	45.73	20.840		
9,500.0	9,384.2	9,466.4	9,387.9	27.6	22.8	-114.77	192.6	915.5	953.2	907.2	45.96	20.741		
9,600.0	9,484.2	9,566.4	9,487.9	27.7	22.9	-114.79	192.1	914.7	953.4	907.2	46.19	20.642		
9,700.0	9,584.2	9,666.4	9,587.9	27.8	23.0	-114.82	191.6	913.9	953.6	907.2	46.42	20.543		
9,800.0	9,684.2	9,766.4	9,687.9	27.9	23.2	-114.85	191.2	913.1	953.8	907.2	46.65	20.445		
9,900.0	9,784.2	9,866.4	9,787.9	28.0	23.3	-114.88	190.7	912.3	954.0	907.1	46.89	20.347		
10,000.0	9,884.2	9,966.4	9,887.9	28.1	23.4	-114.90	190.2	911.5	954.2	907.1	47.12	20.250		
10,100.0	9,984.1	10,066.4	9,987.9	28.2	23.5	-114.93	189.8	910.6	954.4	907.1	47.36	20.153		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-8D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						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		
10,200.0	10,084.1	10,166.4	10,087.9	28.3	23.6	114.96	189.3	909.8	954.7	907.1	47.60	20.056		
10,300.0	10,184.1	10,266.4	10,187.9	28.4	23.8	114.99	188.8	909.0	954.9	907.0	47.84	19.960		
10,342.9	10,227.0	10,309.3	10,230.8	28.4	23.8	115.00	188.6	908.7	955.0	907.0	47.94	19.918 SF		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-5D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-5D	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 #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 8144.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

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

