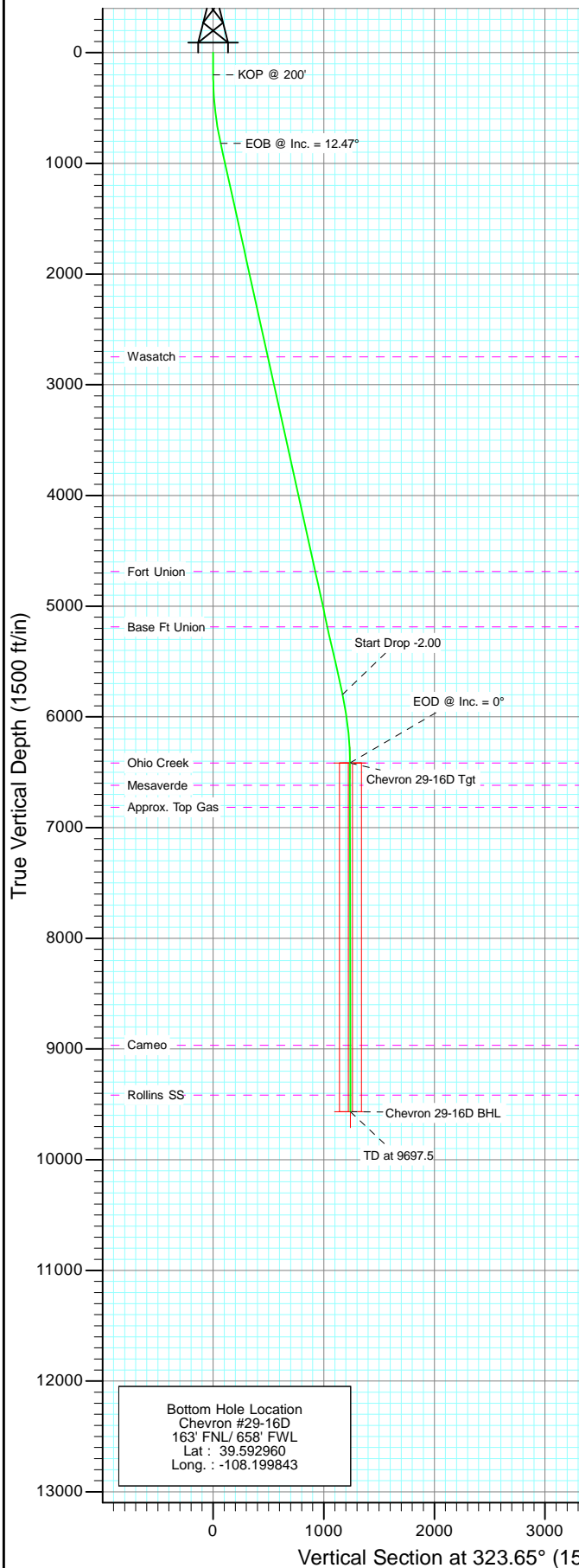
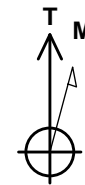
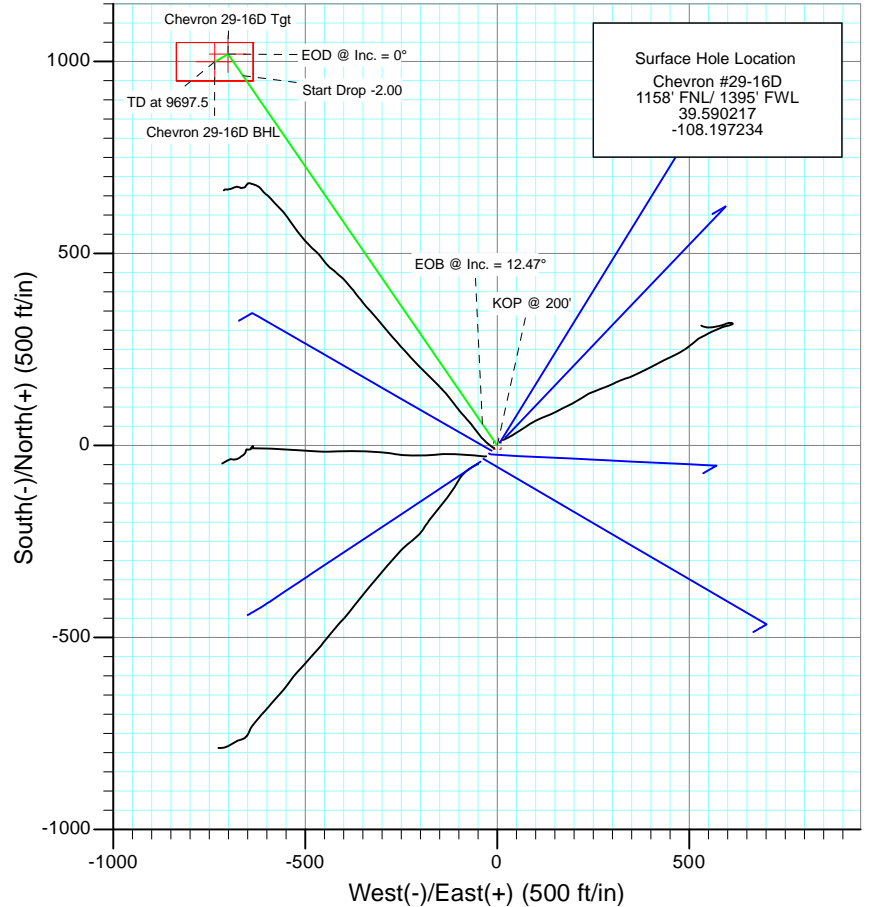




Project: Garfield County
Site: Chevron C-D29-596
Well: Chevron #29-16D
Wellbore: DD
Design: Plan #3



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	823.7	12.47	325.50	818.8	55.7	-38.3	2.00	325.50	67.6	
4	5923.5	12.47	325.50	5798.2	963.5	-662.2	0.00	0.00	1168.5	
5	6547.2	0.00	0.00	6417.0	1019.2	-700.5	2.00	180.00	1236.1	Chevron 29-16D Tgt
6	6696.5	0.75	240.02	6566.2	1018.7	-701.4	0.50	240.02	1236.2	
7	9697.5	0.75	240.02	9567.0	999.2	-735.2	0.00	0.00	1240.5	Chevron 29-16D BHL



Azimuths to True North
Magnetic North: 10.80°

Magnetic Field
Strength: 52537.0snT
Dip Angle: 65.85°
Date: 9/22/2008
Model: IGRF2010

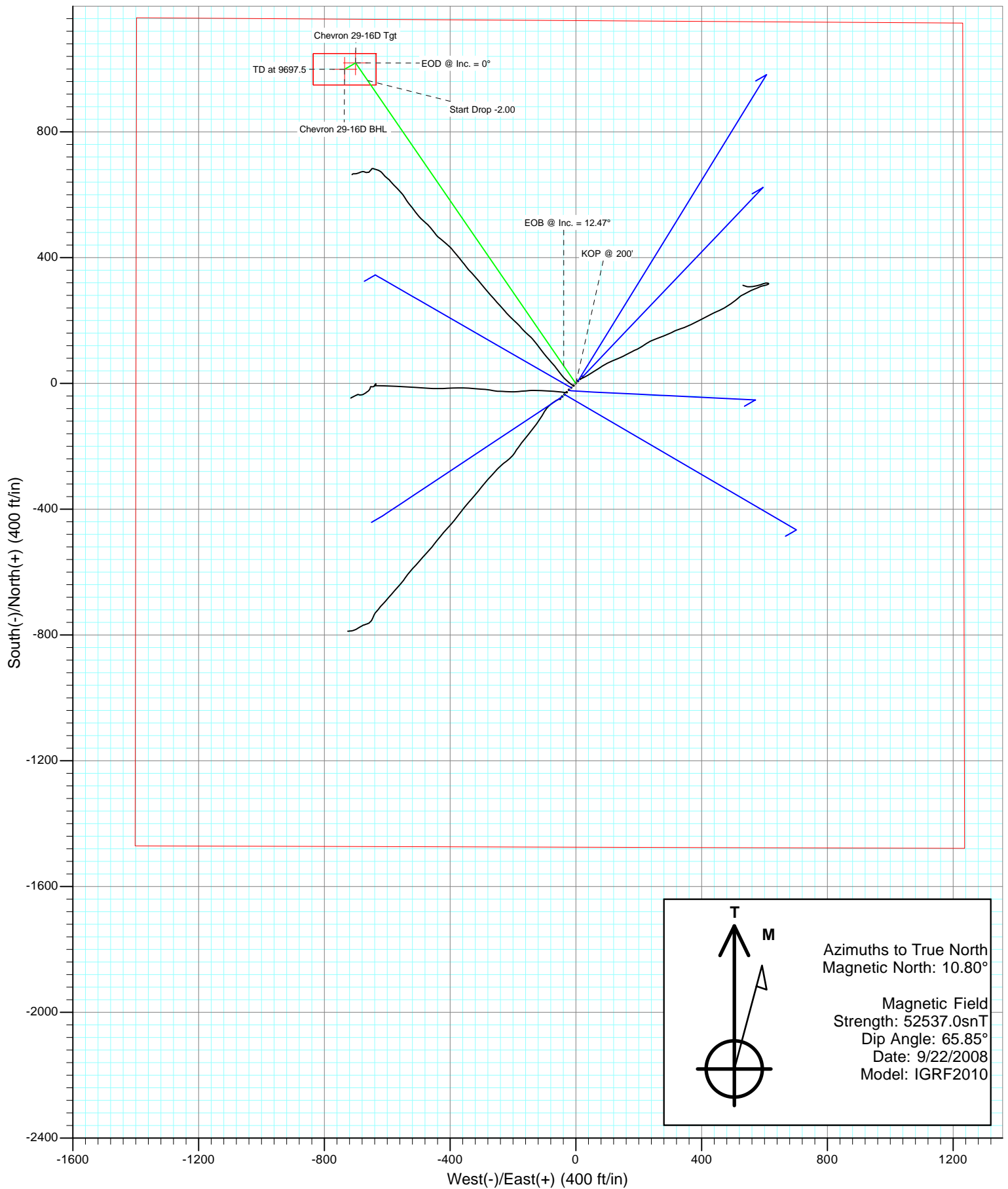
FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
2747.0	2798.5	Wasatch
4687.0	4785.4	Fort Union
5187.0	5297.5	Base Ft Union
6417.0	6547.2	Ohio Creek
6617.0	6747.2	Mesaverde
6817.0	6947.2	Approx. Top Gas
8967.0	9097.4	Cameo
9417.0	9547.5	Rollins SS

DESIGN DETAILS: Plan #3

JOB#:11XXXX; SC
Well @ 7896.0ft

Target	Azimuth	Origin	N/S	E/W	From TVD
Chevron 29-16D BHL	323.65	Slot	0.0	0.0	0.0



Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron #29-16D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	Well @ 7896.0ft
Project:	Garfield County	MD Reference:	Well @ 7896.0ft
Site:	Chevron C-D29-596	North Reference:	True
Well:	Chevron #29-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

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 C-D29-596			
Site Position:		Northing:	1,651,165.49 ft	Latitude:	39.590256
From:	Lat/Long	Easting:	2,239,989.14 ft	Longitude:	-108.197183
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.70 °

Well	Chevron #29-16D					
Well Position	+N/-S	0.0 ft	Northing:	1,651,151.68 ft	Latitude:	39.590217
	+E/-W	0.0 ft	Easting:	2,239,974.35 ft	Longitude:	-108.197234
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,881.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/22/2008	10.80	65.85	52,537

Design	Plan #3			
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	323.65

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	
823.7	12.47	325.50	818.8	55.7	-38.3	2.00	2.00	0.00	325.50	
5,923.5	12.47	325.50	5,798.2	963.5	-662.2	0.00	0.00	0.00	0.00	
6,547.2	0.00	0.00	6,417.0	1,019.2	-700.5	2.00	-2.00	0.00	180.00	Chevron 29-16D Tgt
6,696.5	0.75	240.02	6,566.2	1,018.7	-701.4	0.50	0.50	-80.39	240.02	
9,697.5	0.75	240.02	9,567.0	999.2	-735.2	0.00	0.00	0.00	0.00	Chevron 29-16D BHL

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron #29-16D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	Well @ 7896.0ft
Project:	Garfield County	MD Reference:	Well @ 7896.0ft
Site:	Chevron C-D29-596	North Reference:	True
Well:	Chevron #29-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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
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	0.20	325.50	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	325.50	240.0	0.2	-0.2	0.3	2.00	2.00	
270.0	1.40	325.50	270.0	0.7	-0.5	0.9	2.00	2.00	
300.0	2.00	325.50	300.0	1.4	-1.0	1.7	2.00	2.00	
330.0	2.60	325.50	330.0	2.4	-1.7	2.9	2.00	2.00	
360.0	3.20	325.50	359.9	3.7	-2.5	4.5	2.00	2.00	
390.0	3.80	325.50	389.9	5.2	-3.6	6.3	2.00	2.00	
420.0	4.40	325.50	419.8	7.0	-4.8	8.4	2.00	2.00	
450.0	5.00	325.50	449.7	9.0	-6.2	10.9	2.00	2.00	
480.0	5.60	325.50	479.6	11.3	-7.7	13.7	2.00	2.00	
510.0	6.20	325.50	509.4	13.8	-9.5	16.7	2.00	2.00	
540.0	6.80	325.50	539.2	16.6	-11.4	20.1	2.00	2.00	
570.0	7.40	325.50	569.0	19.7	-13.5	23.8	2.00	2.00	
600.0	8.00	325.50	598.7	23.0	-15.8	27.9	2.00	2.00	
630.0	8.60	325.50	628.4	26.5	-18.2	32.2	2.00	2.00	
660.0	9.20	325.50	658.0	30.4	-20.9	36.8	2.00	2.00	
690.0	9.80	325.50	687.6	34.5	-23.7	41.8	2.00	2.00	
720.0	10.40	325.50	717.1	38.8	-26.7	47.0	2.00	2.00	
750.0	11.00	325.50	746.6	43.4	-29.8	52.6	2.00	2.00	
780.0	11.60	325.50	776.0	48.2	-33.1	58.5	2.00	2.00	
810.0	12.20	325.50	805.4	53.3	-36.6	64.7	2.00	2.00	
823.7	12.47	325.50	818.8	55.7	-38.3	67.6	2.00	2.00	EOB @ Inc. = 12.47°
840.0	12.47	325.50	834.7	58.6	-40.3	71.1	0.00	0.00	
870.0	12.47	325.50	864.0	64.0	-44.0	77.6	0.00	0.00	
900.0	12.47	325.50	893.3	69.3	-47.6	84.1	0.00	0.00	
930.0	12.47	325.50	922.6	74.7	-51.3	90.5	0.00	0.00	
960.0	12.47	325.50	951.9	80.0	-55.0	97.0	0.00	0.00	
990.0	12.47	325.50	981.2	85.3	-58.7	103.5	0.00	0.00	
1,020.0	12.47	325.50	1,010.5	90.7	-62.3	110.0	0.00	0.00	
1,050.0	12.47	325.50	1,039.7	96.0	-66.0	116.4	0.00	0.00	
1,080.0	12.47	325.50	1,069.0	101.4	-69.7	122.9	0.00	0.00	
1,110.0	12.47	325.50	1,098.3	106.7	-73.3	129.4	0.00	0.00	
1,140.0	12.47	325.50	1,127.6	112.0	-77.0	135.9	0.00	0.00	
1,170.0	12.47	325.50	1,156.9	117.4	-80.7	142.3	0.00	0.00	
1,200.0	12.47	325.50	1,186.2	122.7	-84.3	148.8	0.00	0.00	
1,230.0	12.47	325.50	1,215.5	128.0	-88.0	155.3	0.00	0.00	
1,260.0	12.47	325.50	1,244.8	133.4	-91.7	161.8	0.00	0.00	
1,290.0	12.47	325.50	1,274.1	138.7	-95.4	168.3	0.00	0.00	
1,320.0	12.47	325.50	1,303.4	144.1	-99.0	174.7	0.00	0.00	
1,350.0	12.47	325.50	1,332.7	149.4	-102.7	181.2	0.00	0.00	
1,380.0	12.47	325.50	1,362.0	154.7	-106.4	187.7	0.00	0.00	
1,410.0	12.47	325.50	1,391.2	160.1	-110.0	194.2	0.00	0.00	
1,440.0	12.47	325.50	1,420.5	165.4	-113.7	200.6	0.00	0.00	
1,470.0	12.47	325.50	1,449.8	170.8	-117.4	207.1	0.00	0.00	
1,500.0	12.47	325.50	1,479.1	176.1	-121.0	213.6	0.00	0.00	

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron #29-16D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	Well @ 7896.0ft
Project:	Garfield County	MD Reference:	Well @ 7896.0ft
Site:	Chevron C-D29-596	North Reference:	True
Well:	Chevron #29-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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
1,530.0	12.47	325.50	1,508.4	181.4	-124.7	220.1	0.00	0.00	
1,560.0	12.47	325.50	1,537.7	186.8	-128.4	226.5	0.00	0.00	
1,590.0	12.47	325.50	1,567.0	192.1	-132.1	233.0	0.00	0.00	
1,620.0	12.47	325.50	1,596.3	197.5	-135.7	239.5	0.00	0.00	
1,650.0	12.47	325.50	1,625.6	202.8	-139.4	246.0	0.00	0.00	
1,680.0	12.47	325.50	1,654.9	208.1	-143.1	252.4	0.00	0.00	
1,710.0	12.47	325.50	1,684.2	213.5	-146.7	258.9	0.00	0.00	
1,740.0	12.47	325.50	1,713.5	218.8	-150.4	265.4	0.00	0.00	
1,770.0	12.47	325.50	1,742.7	224.2	-154.1	271.9	0.00	0.00	
1,800.0	12.47	325.50	1,772.0	229.5	-157.8	278.4	0.00	0.00	
1,830.0	12.47	325.50	1,801.3	234.8	-161.4	284.8	0.00	0.00	
1,860.0	12.47	325.50	1,830.6	240.2	-165.1	291.3	0.00	0.00	
1,890.0	12.47	325.50	1,859.9	245.5	-168.8	297.8	0.00	0.00	
1,920.0	12.47	325.50	1,889.2	250.9	-172.4	304.3	0.00	0.00	
1,950.0	12.47	325.50	1,918.5	256.2	-176.1	310.7	0.00	0.00	
1,980.0	12.47	325.50	1,947.8	261.5	-179.8	317.2	0.00	0.00	
2,010.0	12.47	325.50	1,977.1	266.9	-183.4	323.7	0.00	0.00	
2,040.0	12.47	325.50	2,006.4	272.2	-187.1	330.2	0.00	0.00	
2,070.0	12.47	325.50	2,035.7	277.6	-190.8	336.6	0.00	0.00	
2,100.0	12.47	325.50	2,065.0	282.9	-194.5	343.1	0.00	0.00	
2,130.0	12.47	325.50	2,094.3	288.2	-198.1	349.6	0.00	0.00	
2,160.0	12.47	325.50	2,123.5	293.6	-201.8	356.1	0.00	0.00	
2,190.0	12.47	325.50	2,152.8	298.9	-205.5	362.5	0.00	0.00	
2,220.0	12.47	325.50	2,182.1	304.3	-209.1	369.0	0.00	0.00	
2,250.0	12.47	325.50	2,211.4	309.6	-212.8	375.5	0.00	0.00	
2,280.0	12.47	325.50	2,240.7	314.9	-216.5	382.0	0.00	0.00	
2,310.0	12.47	325.50	2,270.0	320.3	-220.1	388.4	0.00	0.00	
2,340.0	12.47	325.50	2,299.3	325.6	-223.8	394.9	0.00	0.00	
2,370.0	12.47	325.50	2,328.6	331.0	-227.5	401.4	0.00	0.00	
2,400.0	12.47	325.50	2,357.9	336.3	-231.2	407.9	0.00	0.00	
2,430.0	12.47	325.50	2,387.2	341.6	-234.8	414.4	0.00	0.00	
2,460.0	12.47	325.50	2,416.5	347.0	-238.5	420.8	0.00	0.00	
2,490.0	12.47	325.50	2,445.8	352.3	-242.2	427.3	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 29-16D Tgt	0.00	0.00	6,417.0	1,019.2	-700.5	1,652,191.22	2,239,304.37	39.593015	-108.199720
- plan misses target center by 4052.9ft at 2490.0ft MD (2445.8 TVD, 352.3 N, -242.2 E)									
- Point									
Chevron 29-16D BHL	0.00	0.00	9,567.0	999.2	-735.2	1,652,172.25	2,239,269.09	39.592960	-108.199843
- plan misses target center by 7167.5ft at 2490.0ft MD (2445.8 TVD, 352.3 N, -242.2 E)									
- Rectangle (sides W100.0 H200.0 D0.0)									

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron #29-16D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	Well @ 7896.0ft
Project:	Garfield County	MD Reference:	Well @ 7896.0ft
Site:	Chevron C-D29-596	North Reference:	True
Well:	Chevron #29-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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	12.47	325.50	2,455.5	354.1	-243.4	429.5	0.00	0.00	
2,600.0	12.47	325.50	2,553.2	371.9	-255.6	451.1	0.00	0.00	
2,700.0	12.47	325.50	2,650.8	389.7	-267.9	472.6	0.00	0.00	
2,798.5	12.47	325.50	2,747.0	407.2	-279.9	493.9	0.00	0.00	Wasatch
2,800.0	12.47	325.50	2,748.4	407.5	-280.1	494.2	0.00	0.00	
2,900.0	12.47	325.50	2,846.1	425.3	-292.3	515.8	0.00	0.00	
3,000.0	12.47	325.50	2,943.7	443.1	-304.6	537.4	0.00	0.00	
3,100.0	12.47	325.50	3,041.4	460.9	-316.8	559.0	0.00	0.00	
3,200.0	12.47	325.50	3,139.0	478.7	-329.0	580.6	0.00	0.00	
3,300.0	12.47	325.50	3,236.6	496.5	-341.3	602.2	0.00	0.00	
3,400.0	12.47	325.50	3,334.3	514.3	-353.5	623.8	0.00	0.00	
3,500.0	12.47	325.50	3,431.9	532.1	-365.7	645.3	0.00	0.00	
3,600.0	12.47	325.50	3,529.6	549.9	-378.0	666.9	0.00	0.00	
3,700.0	12.47	325.50	3,627.2	567.7	-390.2	688.5	0.00	0.00	
3,800.0	12.47	325.50	3,724.8	585.5	-402.4	710.1	0.00	0.00	
3,900.0	12.47	325.50	3,822.5	603.3	-414.7	731.7	0.00	0.00	
4,000.0	12.47	325.50	3,920.1	621.1	-426.9	753.3	0.00	0.00	
4,100.0	12.47	325.50	4,017.8	638.9	-439.1	774.9	0.00	0.00	
4,200.0	12.47	325.50	4,115.4	656.7	-451.4	796.5	0.00	0.00	
4,300.0	12.47	325.50	4,213.0	674.5	-463.6	818.0	0.00	0.00	
4,400.0	12.47	325.50	4,310.7	692.3	-475.8	839.6	0.00	0.00	
4,500.0	12.47	325.50	4,408.3	710.1	-488.1	861.2	0.00	0.00	
4,600.0	12.47	325.50	4,505.9	727.9	-500.3	882.8	0.00	0.00	
4,700.0	12.47	325.50	4,603.6	745.7	-512.6	904.4	0.00	0.00	
4,785.4	12.47	325.50	4,687.0	760.9	-523.0	922.8	0.00	0.00	Fort Union
4,800.0	12.47	325.50	4,701.2	763.5	-524.8	926.0	0.00	0.00	
4,900.0	12.47	325.50	4,798.9	781.3	-537.0	947.6	0.00	0.00	
5,000.0	12.47	325.50	4,896.5	799.1	-549.3	969.2	0.00	0.00	
5,100.0	12.47	325.50	4,994.1	816.9	-561.5	990.7	0.00	0.00	
5,200.0	12.47	325.50	5,091.8	834.7	-573.7	1,012.3	0.00	0.00	
5,297.5	12.47	325.50	5,187.0	852.0	-585.7	1,033.4	0.00	0.00	Base Ft Union
5,300.0	12.47	325.50	5,189.4	852.5	-586.0	1,033.9	0.00	0.00	
5,400.0	12.47	325.50	5,287.1	870.3	-598.2	1,055.5	0.00	0.00	
5,500.0	12.47	325.50	5,384.7	888.1	-610.4	1,077.1	0.00	0.00	
5,600.0	12.47	325.50	5,482.3	905.9	-622.7	1,098.7	0.00	0.00	
5,700.0	12.47	325.50	5,580.0	923.7	-634.9	1,120.3	0.00	0.00	
5,800.0	12.47	325.50	5,677.6	941.5	-647.1	1,141.9	0.00	0.00	
5,900.0	12.47	325.50	5,775.3	959.3	-659.4	1,163.4	0.00	0.00	
5,923.5	12.47	325.50	5,798.2	963.5	-662.2	1,168.5	0.00	0.00	Start Drop -2.00
6,000.0	10.94	325.50	5,873.1	976.3	-671.0	1,184.0	2.00	-2.00	
6,100.0	8.94	325.50	5,971.6	990.5	-680.8	1,201.3	2.00	-2.00	
6,200.0	6.94	325.50	6,070.6	1,001.9	-688.6	1,215.1	2.00	-2.00	
6,300.0	4.94	325.50	6,170.1	1,010.4	-694.5	1,225.5	2.00	-2.00	
6,400.0	2.94	325.50	6,269.9	1,016.1	-698.4	1,232.3	2.00	-2.00	
6,500.0	0.94	325.50	6,369.8	1,018.9	-700.3	1,235.7	2.00	-2.00	
6,547.2	0.00	0.00	6,417.0	1,019.2	-700.5	1,236.1	2.00	-2.00	EOD @ Inc. = 0° - Ohio Creek - Chevron 29-16
6,600.0	0.26	240.02	6,469.8	1,019.1	-700.7	1,236.1	0.50	0.50	
6,696.5	0.75	240.02	6,566.2	1,018.7	-701.4	1,236.2	0.50	0.50	
6,700.0	0.75	240.02	6,569.8	1,018.7	-701.4	1,236.2	0.00	0.00	
6,747.2	0.75	240.02	6,617.0	1,018.4	-702.0	1,236.3	0.00	0.00	Mesaverde
6,800.0	0.75	240.02	6,669.8	1,018.0	-702.6	1,236.4	0.00	0.00	
6,900.0	0.75	240.02	6,769.8	1,017.4	-703.7	1,236.5	0.00	0.00	

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron #29-16D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	Well @ 7896.0ft
Project:	Garfield County	MD Reference:	Well @ 7896.0ft
Site:	Chevron C-D29-596	North Reference:	True
Well:	Chevron #29-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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
6,947.2	0.75	240.02	6,817.0	1,017.1	-704.2	1,236.6	0.00	0.00	Approx. Top Gas
7,000.0	0.75	240.02	6,869.8	1,016.7	-704.8	1,236.7	0.00	0.00	
7,100.0	0.75	240.02	6,969.8	1,016.1	-705.9	1,236.8	0.00	0.00	
7,200.0	0.75	240.02	7,069.7	1,015.4	-707.1	1,236.9	0.00	0.00	
7,300.0	0.75	240.02	7,169.7	1,014.8	-708.2	1,237.1	0.00	0.00	
7,400.0	0.75	240.02	7,269.7	1,014.1	-709.3	1,237.2	0.00	0.00	
7,500.0	0.75	240.02	7,369.7	1,013.5	-710.5	1,237.4	0.00	0.00	
7,600.0	0.75	240.02	7,469.7	1,012.8	-711.6	1,237.5	0.00	0.00	
7,700.0	0.75	240.02	7,569.7	1,012.2	-712.7	1,237.7	0.00	0.00	
7,800.0	0.75	240.02	7,669.7	1,011.5	-713.8	1,237.8	0.00	0.00	
7,900.0	0.75	240.02	7,769.7	1,010.9	-715.0	1,238.0	0.00	0.00	
8,000.0	0.75	240.02	7,869.7	1,010.2	-716.1	1,238.1	0.00	0.00	
8,100.0	0.75	240.02	7,969.7	1,009.6	-717.2	1,238.2	0.00	0.00	
8,200.0	0.75	240.02	8,069.7	1,008.9	-718.4	1,238.4	0.00	0.00	
8,300.0	0.75	240.02	8,169.7	1,008.3	-719.5	1,238.5	0.00	0.00	
8,400.0	0.75	240.02	8,269.6	1,007.6	-720.6	1,238.7	0.00	0.00	
8,500.0	0.75	240.02	8,369.6	1,007.0	-721.7	1,238.8	0.00	0.00	
8,600.0	0.75	240.02	8,469.6	1,006.3	-722.9	1,239.0	0.00	0.00	
8,700.0	0.75	240.02	8,569.6	1,005.7	-724.0	1,239.1	0.00	0.00	
8,800.0	0.75	240.02	8,669.6	1,005.0	-725.1	1,239.3	0.00	0.00	
8,900.0	0.75	240.02	8,769.6	1,004.4	-726.3	1,239.4	0.00	0.00	
9,000.0	0.75	240.02	8,869.6	1,003.7	-727.4	1,239.5	0.00	0.00	
9,097.4	0.75	240.02	8,967.0	1,003.1	-728.5	1,239.7	0.00	0.00	Cameo
9,100.0	0.75	240.02	8,969.6	1,003.1	-728.5	1,239.7	0.00	0.00	
9,200.0	0.75	240.02	9,069.6	1,002.4	-729.6	1,239.8	0.00	0.00	
9,300.0	0.75	240.02	9,169.6	1,001.8	-730.8	1,240.0	0.00	0.00	
9,400.0	0.75	240.02	9,269.6	1,001.1	-731.9	1,240.1	0.00	0.00	
9,500.0	0.75	240.02	9,369.6	1,000.5	-733.0	1,240.3	0.00	0.00	
9,547.5	0.75	240.02	9,417.0	1,000.2	-733.6	1,240.3	0.00	0.00	Rollins SS
9,600.0	0.75	240.02	9,469.5	999.8	-734.1	1,240.4	0.00	0.00	
9,697.5	0.75	240.02	9,567.0	999.2	-735.2	1,240.5	0.00	0.00	Chevron 29-16D BHL

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Chevron 29-16D Tgt	0.00	0.00	6,417.0	1,019.2	-700.5	1,652,191.22	2,239,304.37	39.593015	-108.199720
- plan hits target center									
- Point									
Chevron 29-16D BHL	0.00	0.00	9,567.0	999.2	-735.2	1,652,172.25	2,239,269.09	39.592960	-108.199843
- plan hits target center									
- Rectangle (sides W100.0 H200.0 D0.0)									

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron #29-16D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	Well @ 7896.0ft
Project:	Garfield County	MD Reference:	Well @ 7896.0ft
Site:	Chevron C-D29-596	North Reference:	True
Well:	Chevron #29-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,798.5	2,747.0	Wasatch				
4,785.4	4,687.0	Fort Union				
5,297.5	5,187.0	Base Ft Union				
6,547.2	6,417.0	Ohio Creek				
6,747.2	6,617.0	Mesaverde				
6,947.2	6,817.0	Approx. Top Gas				
9,097.4	8,967.0	Cameo				
9,547.5	9,417.0	Rollins SS				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
823.7	818.8	55.7	-38.3	EOB @ Inc. = 12.47°
5,923.5	5,798.2	963.5	-662.2	Start Drop -2.00
6,547.2	6,417.0	1,019.2	-700.5	EOD @ Inc. = 0°
9,697.5	9,567.0	999.2	-735.2	TD at 9697.5

Berry Petroleum Company (NAD 83)

Garfield County

Chevron C-D29-596

Chevron #29-16D

DD

Plan #3

Anticollision Report

06 January, 2011

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Reference	Plan #3		
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 1,169.7ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	1/5/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	9,697.5	Plan #3 (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 C-D29-596						
Chevron #29-7D - DD - Plan #4	200.0	200.0	30.1	29.4	46.568	CC, ES
Chevron #29-7D - DD - Plan #4	500.0	495.6	45.3	43.6	25.632	SF
Chevron #29-11D - DD - DD	0.0	10.0	40.0			
Chevron #29-11D - DD - DD	9,697.5	9,603.6	1,046.0	1,004.3	25.088	SF
Chevron #29-12D - DD - DD	0.0	10.0	20.2			
Chevron #29-12D - DD - DD	400.0	407.7	30.4	29.1	22.405	SF
Chevron #29-13D - DD - Plan #3	234.1	234.2	29.8	29.1	38.894	CC
Chevron #29-13D - DD - Plan #3	300.0	300.1	30.0	29.0	29.923	ES
Chevron #29-13D - DD - Plan #3	500.0	499.6	37.3	35.5	21.006	SF
Chevron #29-14D - DD - Plan #3	200.0	200.0	20.0	19.3	30.900	CC, ES
Chevron #29-14D - DD - Plan #3	700.0	698.7	38.4	35.5	13.216	SF
Chevron #29-15D - DD - DD	0.0	10.0	9.9			
Chevron #29-15D - DD - DD	1,200.0	1,208.1	32.1	25.5	4.851	SF
Chevron #29-3D - DD - DD	0.0	10.0	69.8			
Chevron #29-3D - DD - DD	100.0	109.7	70.0	69.7	227.251	ES
Chevron #29-3D - DD - DD	700.0	686.8	135.1	132.5	50.868	SF
Chevron #29-5D - DD - Plan #3	284.4	284.7	50.0	49.0	52.808	CC
Chevron #29-5D - DD - Plan #3	300.0	300.3	50.0	49.0	49.867	ES
Chevron #29-5D - DD - Plan #3	500.0	498.3	57.4	55.6	31.880	SF
Chevron #29-6D - DD - Plan #3	200.0	200.0	59.9	59.3	92.779	CC, ES
Chevron #29-6D - DD - Plan #3	800.0	785.5	130.4	127.2	41.103	SF
Chevron #29-8D - DD - Plan #3	200.0	200.0	10.1	9.5	15.684	CC, ES
Chevron #29-8D - DD - Plan #3	300.0	299.6	11.6	10.6	11.578	SF

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-7D - DD - Plan #4													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	45.42	21.1	21.4	30.1					
100.0	100.0	100.0	100.0	0.1	0.1	45.42	21.1	21.4	30.1	29.8	0.30	101.354		
200.0	200.0	200.0	200.0	0.3	0.3	45.42	21.1	21.4	30.1	29.4	0.65	46.568 CC, ES		
300.0	300.0	298.9	298.9	0.5	0.5	82.88	22.3	22.6	31.5	30.5	1.00	31.642		
400.0	399.8	397.5	397.4	0.7	0.7	90.23	26.0	26.1	36.4	35.0	1.37	26.630		
500.0	499.5	495.6	495.1	0.9	0.9	98.69	32.1	31.9	45.3	43.6	1.77	25.632 SF		
600.0	598.7	592.9	591.6	1.2	1.2	105.91	40.6	40.0	58.9	56.7	2.22	26.522		
700.0	697.5	690.9	688.8	1.5	1.4	111.96	50.5	49.4	76.0	73.3	2.73	27.875		
800.0	795.6	788.7	785.5	1.9	1.7	117.53	60.4	58.9	95.3	92.0	3.28	29.072		
900.0	893.3	886.0	881.9	2.3	2.0	122.40	70.2	68.2	116.4	112.6	3.84	30.343		
1,000.0	990.9	983.3	978.3	2.7	2.3	125.86	80.0	77.6	138.3	133.9	4.40	31.435		
1,100.0	1,088.6	1,080.6	1,074.6	3.1	2.6	128.38	89.9	87.0	160.4	155.5	4.96	32.357		
1,200.0	1,186.2	1,177.9	1,171.0	3.5	2.9	130.28	99.7	96.4	182.8	177.3	5.52	33.139		
1,300.0	1,283.8	1,275.2	1,267.3	3.9	3.2	131.77	109.5	105.8	205.4	199.3	6.08	33.806		
1,400.0	1,381.5	1,372.5	1,363.6	4.3	3.4	132.96	119.4	115.2	228.0	221.4	6.63	34.379		
1,500.0	1,479.1	1,469.8	1,460.0	4.7	3.7	133.94	129.2	124.5	250.8	243.6	7.19	34.876		
1,600.0	1,576.8	1,567.1	1,556.3	5.1	4.0	134.76	139.0	133.9	273.5	265.8	7.75	35.310		
1,700.0	1,674.4	1,664.4	1,652.7	5.5	4.3	135.45	148.9	143.3	296.4	288.1	8.30	35.693		
1,800.0	1,772.0	1,761.7	1,749.0	6.0	4.6	136.04	158.7	152.7	319.2	310.4	8.86	36.032		
1,900.0	1,869.7	1,859.0	1,845.4	6.4	4.9	136.55	168.6	162.1	342.1	332.7	9.42	36.335		
2,000.0	1,967.3	1,956.3	1,941.7	6.8	5.2	137.00	178.4	171.4	365.0	355.1	9.97	36.606		
2,100.0	2,065.0	2,053.6	2,038.1	7.2	5.5	137.39	188.2	180.8	388.0	377.4	10.53	36.852		
2,200.0	2,162.6	2,150.9	2,134.4	7.6	5.8	137.74	198.1	190.2	410.9	399.8	11.08	37.074		
2,300.0	2,260.2	2,248.2	2,230.8	8.0	6.1	138.06	207.9	199.6	433.9	422.3	11.64	37.276		
2,400.0	2,357.9	2,345.5	2,327.1	8.5	6.4	138.34	217.7	209.0	456.9	444.7	12.20	37.461		
2,500.0	2,455.5	2,442.8	2,423.5	8.9	6.6	138.60	227.6	218.4	479.8	467.1	12.75	37.631		
2,600.0	2,553.2	2,540.1	2,519.8	9.3	6.9	138.83	237.4	227.7	502.8	489.5	13.31	37.787		
2,700.0	2,650.8	2,637.4	2,616.2	9.7	7.2	139.04	247.2	237.1	525.8	512.0	13.86	37.931		
2,800.0	2,748.4	2,734.7	2,712.5	10.1	7.5	139.23	257.1	246.5	548.8	534.4	14.42	38.065		
2,900.0	2,846.1	2,832.0	2,808.9	10.5	7.8	139.41	266.9	255.9	571.9	556.9	14.97	38.190		
3,000.0	2,943.7	2,929.3	2,905.2	11.0	8.1	139.58	276.8	265.3	594.9	579.3	15.53	38.305		
3,100.0	3,041.4	3,026.6	3,001.6	11.4	8.4	139.73	286.6	274.7	617.9	601.8	16.09	38.413		
3,200.0	3,139.0	3,124.0	3,097.9	11.8	8.7	139.87	296.4	284.0	640.9	624.3	16.64	38.514		
3,300.0	3,236.6	3,221.3	3,194.2	12.2	9.0	140.00	306.3	293.4	663.9	646.7	17.20	38.609		
3,400.0	3,334.3	3,318.6	3,290.6	12.6	9.3	140.12	316.1	302.8	687.0	669.2	17.75	38.698		
3,500.0	3,431.9	3,415.9	3,386.9	13.0	9.6	140.24	325.9	312.2	710.0	691.7	18.31	38.782		
3,600.0	3,529.6	3,513.2	3,483.3	13.5	9.9	140.35	335.8	321.6	733.0	714.2	18.86	38.861		
3,700.0	3,627.2	3,610.5	3,579.6	13.9	10.2	140.45	345.6	331.0	756.1	736.7	19.42	38.936		
3,800.0	3,724.8	3,707.8	3,676.0	14.3	10.4	140.54	355.4	340.3	779.1	759.1	19.97	39.007		
3,900.0	3,822.5	3,805.1	3,772.3	14.7	10.7	140.63	365.3	349.7	802.2	781.6	20.53	39.074		
4,000.0	3,920.1	3,902.4	3,868.7	15.1	11.0	140.72	375.1	359.1	825.2	804.1	21.08	39.137		
4,100.0	4,017.8	3,999.7	3,965.0	15.5	11.3	140.80	385.0	368.5	848.3	826.6	21.64	39.198		
4,200.0	4,115.4	4,097.0	4,061.4	16.0	11.6	140.87	394.8	377.9	871.3	849.1	22.20	39.255		
4,300.0	4,213.0	4,194.3	4,157.7	16.4	11.9	140.94	404.6	387.2	894.3	871.6	22.75	39.310		
4,400.0	4,310.7	4,291.6	4,254.1	16.8	12.2	141.01	414.5	396.6	917.4	894.1	23.31	39.362		
4,500.0	4,408.3	4,388.9	4,350.4	17.2	12.5	141.08	424.3	406.0	940.4	916.6	23.86	39.412		
4,600.0	4,505.9	4,486.2	4,446.8	17.6	12.8	141.14	434.1	415.4	963.5	939.1	24.42	39.459		
4,700.0	4,603.6	4,583.5	4,543.1	18.0	13.1	141.20	444.0	424.8	986.6	961.6	24.97	39.505		
4,800.0	4,701.2	4,680.8	4,639.5	18.5	13.4	141.26	453.8	434.2	1,009.6	984.1	25.53	39.548		
4,900.0	4,798.9	4,778.1	4,735.8	18.9	13.7	141.31	463.6	443.5	1,032.7	1,006.6	26.08	39.590		
5,000.0	4,896.5	4,875.4	4,832.2	19.3	14.0	141.36	473.5	452.9	1,055.7	1,029.1	26.64	39.630		
5,100.0	4,994.1	4,972.7	4,928.5	19.7	14.2	141.41	483.3	462.3	1,078.8	1,051.6	27.19	39.669		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design													Chevron C-D29-596 - Chevron #29-7D - 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	5,091.8	5,070.0	5,024.8	20.1	14.5	141.46	493.1	471.7	1,101.8	1,074.1	27.75	39.706					
5,300.0	5,189.4	5,167.3	5,121.2	20.6	14.8	141.50	503.0	481.1	1,124.9	1,096.6	28.31	39.741					
5,400.0	5,287.1	5,264.6	5,217.5	21.0	15.1	141.54	512.8	490.5	1,147.9	1,119.1	28.86	39.775					

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-11D - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 201-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	10.0	10.0	0.0	0.0	-134.57	-28.0	-28.5	40.0					
100.0	100.0	109.8	109.8	0.1	0.2	-134.33	-28.1	-28.8	40.3	40.0	0.31	128.591		
200.0	200.0	209.5	209.5	0.3	0.3	-133.71	-28.4	-29.7	41.1	40.5	0.64	64.318		
300.0	300.0	309.2	309.2	0.5	0.5	-100.36	-29.0	-31.5	43.1	42.1	0.99	43.341		
400.0	399.8	408.8	408.8	0.7	0.7	-103.81	-28.8	-34.6	46.2	44.8	1.37	33.715		
500.0	499.5	507.7	507.4	0.9	0.9	-107.19	-27.8	-40.7	51.7	49.9	1.78	29.010		
600.0	598.7	606.2	605.5	1.2	1.1	-110.31	-26.6	-50.0	60.3	58.0	2.25	26.787		
700.0	697.5	704.3	702.8	1.5	1.4	-113.30	-25.5	-62.0	72.0	69.2	2.78	25.886		
800.0	795.6	801.9	799.2	1.9	1.7	-115.54	-25.0	-77.3	87.5	84.1	3.39	25.803		
900.0	893.3	899.8	895.4	2.3	2.0	-116.87	-23.4	-95.3	104.6	100.5	4.05	25.794		
1,000.0	990.9	996.5	990.2	2.7	2.4	-117.36	-22.2	-114.6	122.7	118.0	4.74	25.901		
1,100.0	1,088.6	1,093.7	1,085.3	3.1	2.7	-117.76	-22.2	-134.4	142.2	136.7	5.44	26.142		
1,200.0	1,186.2	1,190.3	1,179.9	3.5	3.1	-118.26	-23.2	-154.1	162.6	156.4	6.12	26.542		
1,300.0	1,283.8	1,287.8	1,275.5	3.9	3.5	-119.01	-24.9	-173.0	183.1	176.3	6.81	26.901		
1,400.0	1,381.5	1,390.0	1,376.0	4.3	3.8	-119.94	-26.4	-191.5	203.0	195.5	7.49	27.097		
1,500.0	1,479.1	1,491.7	1,476.3	4.7	4.2	-121.00	-26.4	-208.1	220.8	212.7	8.15	27.088		
1,600.0	1,576.8	1,590.7	1,574.3	5.1	4.5	-122.18	-25.8	-222.6	237.5	228.7	8.79	27.031		
1,700.0	1,674.4	1,691.2	1,673.8	5.5	4.8	-123.43	-25.2	-236.4	254.0	244.6	9.41	27.000		
1,800.0	1,772.0	1,790.7	1,772.5	6.0	5.0	-124.74	-24.8	-249.0	270.3	260.3	10.00	27.028		
1,900.0	1,869.7	1,892.4	1,873.4	6.4	5.3	-125.87	-23.1	-261.8	285.7	275.1	10.61	26.921		
2,000.0	1,967.3	1,992.5	1,972.6	6.8	5.6	-126.74	-20.7	-274.8	300.5	289.3	11.22	26.784		
2,100.0	2,065.0	2,086.7	2,066.1	7.2	5.9	-127.65	-19.1	-286.3	315.8	304.0	11.79	26.790		
2,200.0	2,162.6	2,184.8	2,163.4	7.6	6.1	-128.51	-18.5	-298.5	332.3	319.9	12.37	26.866		
2,300.0	2,260.2	2,285.6	2,263.4	8.0	6.4	-129.29	-17.4	-311.1	348.4	335.5	12.95	26.902		
2,400.0	2,357.9	2,380.3	2,357.3	8.5	6.7	-129.83	-16.3	-323.7	364.7	351.1	13.55	26.910		
2,500.0	2,455.5	2,478.1	2,453.9	8.9	7.1	-129.99	-15.3	-339.2	381.8	367.6	14.21	26.869		
2,600.0	2,553.2	2,571.6	2,545.8	9.3	7.4	-129.86	-14.4	-355.9	399.5	384.6	14.89	26.832		
2,700.0	2,650.8	2,670.1	2,642.7	9.7	7.7	-129.73	-14.2	-373.7	418.0	402.4	15.56	26.853		
2,800.0	2,748.4	2,764.4	2,735.6	10.1	8.1	-129.75	-14.6	-389.8	436.7	420.5	16.22	26.930		
2,900.0	2,846.1	2,863.9	2,833.8	10.5	8.4	-129.84	-15.5	-406.4	455.8	439.0	16.86	27.029		
3,000.0	2,943.7	2,962.2	2,930.8	11.0	8.7	-129.98	-16.2	-422.3	474.7	457.2	17.51	27.114		
3,100.0	3,041.4	3,065.1	3,032.2	11.4	9.1	-129.99	-16.3	-439.8	493.2	475.0	18.20	27.098		
3,200.0	3,139.0	3,162.7	3,128.4	11.8	9.4	-130.02	-16.1	-456.2	511.3	492.4	18.85	27.119		
3,300.0	3,236.6	3,266.3	3,230.4	12.2	9.8	-129.97	-15.0	-474.1	528.7	509.2	19.56	27.037		
3,400.0	3,334.3	3,362.9	3,325.5	12.6	10.1	-129.94	-14.0	-490.6	546.1	525.9	20.22	27.010		
3,500.0	3,431.9	3,463.0	3,424.1	13.0	10.5	-129.90	-12.8	-507.9	563.4	542.5	20.90	26.954		
3,600.0	3,529.6	3,561.2	3,520.9	13.5	10.8	-129.91	-11.7	-524.3	580.7	559.1	21.57	26.923		
3,700.0	3,627.2	3,659.8	3,618.1	13.9	11.2	-129.91	-10.6	-540.9	597.9	575.7	22.24	26.890		
3,800.0	3,724.8	3,756.9	3,713.9	14.3	11.5	-129.94	-9.7	-556.9	615.2	592.3	22.90	26.870		
3,900.0	3,822.5	3,853.6	3,809.2	14.7	11.8	-129.93	-8.9	-573.5	632.9	609.3	23.56	26.861		
4,000.0	3,920.1	3,952.1	3,906.3	15.1	12.2	-129.96	-8.4	-589.8	650.6	626.4	24.22	26.865		
4,100.0	4,017.8	4,053.1	4,006.1	15.5	12.5	-130.07	-7.9	-605.7	668.3	643.4	24.85	26.890		
4,200.0	4,115.4	4,159.5	4,111.6	16.0	12.7	-130.46	-7.5	-619.0	685.1	659.7	25.42	26.957		
4,300.0	4,213.0	4,255.5	4,207.2	16.4	13.0	-131.06	-7.2	-627.9	701.3	675.4	25.90	27.082		
4,400.0	4,310.7	4,363.5	4,314.9	16.8	13.2	-131.86	-7.3	-635.8	717.6	691.3	26.34	27.243		
4,500.0	4,408.3	4,467.9	4,419.2	17.2	13.3	-132.87	-6.6	-639.9	732.6	706.0	26.69	27.448		
4,600.0	4,505.9	4,566.0	4,517.3	17.6	13.4	-134.02	-6.4	-640.5	747.5	720.6	26.96	27.725		
4,700.0	4,603.6	4,663.7	4,615.0	18.0	13.5	-135.22	-6.3	-639.9	762.7	735.5	27.22	28.024		
4,800.0	4,701.2	4,761.5	4,712.8	18.5	13.6	-136.37	-6.3	-639.3	778.2	750.8	27.46	28.344		
4,900.0	4,798.9	4,869.7	4,821.0	18.9	13.7	-137.65	-5.4	-637.7	793.2	765.5	27.66	28.674		
5,000.0	4,896.5	4,968.0	4,919.2	19.3	13.8	-138.75	-3.9	-636.5	807.9	780.0	27.89	28.968		
5,100.0	4,994.1	5,062.5	5,013.8	19.7	13.9	-139.72	-2.7	-636.1	823.0	794.9	28.13	29.261		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 201-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
5,200.0	5,091.8	5,158.4	5,109.7	20.1	14.0	-140.65	-1.7	-635.9	838.7	810.4	28.36	29.572		
5,300.0	5,189.4	5,249.9	5,201.2	20.6	14.1	-141.50	-1.0	-635.9	855.0	826.4	28.60	29.891		
5,400.0	5,287.1	5,332.3	5,283.5	21.0	14.2	-142.20	-1.6	-636.6	872.8	844.0	28.86	30.241		
5,500.0	5,384.7	5,425.9	5,377.1	21.4	14.3	-142.96	-3.2	-637.4	891.9	862.8	29.11	30.636		
5,600.0	5,482.3	5,526.3	5,477.5	21.8	14.4	-143.75	-5.1	-638.2	911.2	881.8	29.36	31.037		
5,700.0	5,580.0	5,630.8	5,582.0	22.2	14.6	-144.54	-6.2	-639.0	930.0	900.4	29.60	31.417		
5,800.0	5,677.6	5,727.0	5,678.2	22.6	14.7	-145.24	-7.2	-639.6	948.7	918.9	29.85	31.786		
5,900.0	5,775.3	5,824.6	5,775.8	23.1	14.8	-145.91	-8.1	-640.5	967.6	937.5	30.10	32.148		
6,000.0	5,873.1	5,922.3	5,873.5	23.4	14.9	-146.67	-9.1	-641.6	985.9	955.5	30.36	32.474		
6,100.0	5,971.6	6,024.1	5,975.3	23.8	15.1	-147.32	-10.0	-643.0	1,001.2	970.6	30.62	32.694		
6,200.0	6,070.6	6,126.9	6,078.1	24.0	15.2	-147.78	-10.5	-644.8	1,013.4	982.5	30.90	32.797		
6,300.0	6,170.1	6,229.4	6,180.5	24.2	15.4	-148.08	-10.7	-646.7	1,022.2	991.1	31.17	32.796		
6,400.0	6,269.9	6,331.2	6,282.4	24.4	15.5	-148.26	-10.7	-648.4	1,028.0	996.5	31.43	32.703		
6,500.0	6,369.8	6,433.6	6,384.7	24.5	15.7	-148.29	-10.4	-650.1	1,030.5	998.8	31.69	32.514		
6,600.0	6,469.8	6,529.9	6,481.0	24.6	15.8	-62.76	-10.1	-651.6	1,030.4	998.4	31.96	32.238		
6,648.0	6,517.8	6,572.6	6,523.7	24.6	15.9	-62.73	-10.1	-652.3	1,030.3	998.2	32.09	32.102		
6,700.0	6,569.8	6,613.7	6,564.8	24.7	15.9	-62.72	-10.5	-652.8	1,030.5	998.3	32.22	31.982		
6,800.0	6,669.8	6,701.8	6,652.9	24.8	16.0	-62.74	-12.6	-653.5	1,032.1	999.7	32.48	31.782		
6,900.0	6,769.8	6,803.0	6,754.1	24.8	16.2	-62.76	-15.3	-654.1	1,034.2	1,001.4	32.75	31.577		
7,000.0	6,869.8	6,907.2	6,858.1	24.9	16.3	-62.77	-17.7	-655.0	1,035.9	1,002.8	33.04	31.355		
7,100.0	6,969.8	7,008.6	6,959.5	25.0	16.5	-62.76	-19.8	-656.2	1,037.2	1,003.9	33.33	31.122		
7,200.0	7,069.7	7,108.0	7,058.9	25.1	16.6	-62.73	-21.8	-657.9	1,038.6	1,005.0	33.63	30.886		
7,300.0	7,169.7	7,209.9	7,160.8	25.2	16.8	-62.68	-23.9	-659.8	1,040.0	1,006.0	33.94	30.643		
7,400.0	7,269.7	7,314.5	7,265.3	25.3	16.9	-62.62	-25.7	-662.0	1,041.0	1,006.7	34.26	30.387		
7,500.0	7,369.7	7,416.9	7,367.7	25.4	17.1	-62.56	-27.1	-664.2	1,041.6	1,007.1	34.57	30.127		
7,600.0	7,469.7	7,516.0	7,466.8	25.5	17.2	-62.52	-28.4	-666.1	1,042.3	1,007.4	34.88	29.881		
7,700.0	7,569.7	7,616.1	7,566.8	25.6	17.4	-62.48	-29.7	-668.0	1,042.9	1,007.8	35.19	29.639		
7,800.0	7,669.7	7,718.6	7,669.3	25.7	17.6	-62.44	-30.9	-669.7	1,043.5	1,008.0	35.50	29.397		
7,900.0	7,769.7	7,821.2	7,771.9	25.8	17.7	-62.42	-31.8	-671.3	1,043.7	1,007.9	35.80	29.151		
8,000.0	7,869.7	7,918.1	7,868.8	25.8	17.9	-62.40	-32.8	-672.8	1,044.0	1,007.9	36.10	28.920		
8,100.0	7,969.7	8,019.8	7,970.5	25.9	18.0	-62.38	-33.8	-674.2	1,044.3	1,007.9	36.40	28.689		
8,200.0	8,069.7	8,121.1	8,071.8	26.0	18.2	-62.35	-34.8	-676.0	1,044.6	1,007.9	36.72	28.450		
8,300.0	8,169.7	8,223.5	8,174.2	26.1	18.3	-62.29	-35.5	-678.2	1,044.6	1,007.6	37.04	28.203		
8,400.0	8,269.6	8,327.2	8,277.9	26.2	18.5	-62.25	-36.0	-680.1	1,044.4	1,007.0	37.36	27.957		
8,500.0	8,369.6	8,427.4	8,378.0	26.3	18.7	-62.21	-36.1	-682.0	1,043.8	1,006.2	37.67	27.709		
8,600.0	8,469.6	8,526.8	8,477.3	26.4	18.8	-62.16	-36.4	-684.0	1,043.5	1,005.5	37.99	27.469		
8,700.0	8,569.6	8,629.1	8,579.7	26.5	19.0	-62.12	-36.6	-685.9	1,043.0	1,004.7	38.30	27.230		
8,800.0	8,669.6	8,730.7	8,681.2	26.6	19.1	-62.10	-36.6	-687.3	1,042.3	1,003.7	38.61	26.994		
8,900.0	8,769.6	8,835.2	8,785.7	26.7	19.3	-62.08	-36.3	-689.0	1,041.3	1,002.4	38.93	26.749		
9,000.0	8,869.6	8,937.2	8,887.7	26.8	19.5	-62.05	-35.6	-690.8	1,040.0	1,000.8	39.25	26.498		
9,100.0	8,969.6	9,029.6	8,980.1	27.0	19.6	-62.00	-35.3	-692.7	1,039.0	999.4	39.56	26.265		
9,159.2	9,028.7	9,081.9	9,032.4	27.0	19.7	-61.97	-35.5	-693.9	1,038.8	999.0	39.75	26.136		
9,200.0	9,069.6	9,117.7	9,068.2	27.1	19.8	-61.93	-35.8	-695.0	1,038.9	999.0	39.88	26.051		
9,300.0	9,169.6	9,210.8	9,161.2	27.2	19.9	-61.79	-37.3	-698.5	1,039.7	999.5	40.23	25.847		
9,400.0	9,269.6	9,306.2	9,256.4	27.3	20.1	-61.62	-39.3	-702.6	1,041.1	1,000.5	40.59	25.651		
9,500.0	9,369.6	9,406.9	9,357.0	27.4	20.3	-61.44	-41.7	-707.1	1,042.7	1,001.8	40.96	25.456		
9,600.0	9,469.5	9,504.1	9,454.1	27.5	20.5	-61.26	-44.0	-711.3	1,044.4	1,003.1	41.33	25.270		
9,697.5	9,567.0	9,603.6	9,553.5	27.6	20.7	-61.09	-46.4	-715.6	1,046.0	1,004.3	41.69	25.088 SF		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-12D - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 199-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	10.0	10.0	0.0	0.0	45.32	14.2	14.4	20.2					
100.0	100.0	109.9	109.9	0.1	0.2	45.79	14.3	14.7	20.5	20.2	0.31	65.604		
200.0	200.0	209.7	209.7	0.3	0.3	46.99	14.6	15.7	21.4	20.8	0.64	33.487		
300.0	300.0	309.0	309.0	0.5	0.5	88.36	15.5	18.4	24.0	23.0	0.99	24.122		
400.0	399.8	407.7	407.5	0.7	0.7	100.35	18.0	23.8	30.4	29.1	1.36	22.405 SF		
500.0	499.5	505.9	505.3	0.9	0.9	110.80	22.3	31.6	41.8	40.0	1.75	23.859		
600.0	598.7	603.3	602.0	1.2	1.2	118.53	27.9	41.6	58.0	55.8	2.18	26.605		
700.0	697.5	700.0	697.8	1.5	1.5	123.86	34.8	52.9	78.2	75.5	2.65	29.489		
800.0	795.6	795.5	792.1	1.9	1.8	127.51	42.9	65.6	102.4	99.2	3.17	32.339		
900.0	893.3	891.4	886.5	2.3	2.1	130.33	52.0	79.4	129.3	125.6	3.70	34.929		
1,000.0	990.9	989.0	982.9	2.7	2.4	132.77	60.1	92.8	156.1	151.9	4.23	36.910		
1,100.0	1,088.6	1,086.5	1,079.4	3.1	2.7	135.20	66.3	104.8	182.1	177.3	4.74	38.419		
1,200.0	1,186.2	1,183.0	1,175.1	3.5	3.0	137.23	71.7	116.3	208.1	202.8	5.24	39.743		
1,300.0	1,283.8	1,278.6	1,269.9	3.9	3.2	138.95	76.4	127.5	234.3	228.6	5.73	40.924		
1,400.0	1,381.5	1,374.8	1,365.2	4.3	3.5	140.25	81.4	139.3	261.1	254.8	6.22	41.979		
1,500.0	1,479.1	1,475.0	1,464.6	4.7	3.8	141.36	86.7	150.9	287.3	280.6	6.71	42.804		
1,600.0	1,576.8	1,578.0	1,567.1	5.1	4.0	142.55	91.6	160.6	311.8	304.6	7.19	43.353		
1,700.0	1,674.4	1,675.6	1,664.3	5.5	4.3	143.68	95.8	168.2	335.1	327.4	7.65	43.817		
1,800.0	1,772.0	1,770.3	1,758.6	6.0	4.5	144.65	99.6	176.0	358.9	350.8	8.10	44.297		
1,900.0	1,869.7	1,867.4	1,855.2	6.4	4.7	145.43	104.0	184.5	383.2	374.6	8.56	44.771		
2,000.0	1,967.3	1,963.1	1,950.4	6.8	5.0	146.14	108.0	192.8	407.5	398.5	9.01	45.215		
2,100.0	2,065.0	2,057.3	2,044.2	7.2	5.2	146.68	112.3	201.7	432.4	422.9	9.48	45.631		
2,200.0	2,162.6	2,157.3	2,143.5	7.6	5.5	147.10	117.6	211.4	457.4	447.4	9.96	45.940		
2,300.0	2,260.2	2,257.2	2,242.9	8.0	5.7	147.44	123.4	220.5	481.6	471.1	10.44	46.116		
2,400.0	2,357.9	2,352.1	2,337.2	8.5	6.0	147.69	129.4	229.0	505.5	494.6	10.92	46.278		
2,500.0	2,455.5	2,439.4	2,423.8	8.9	6.2	147.87	134.8	238.0	530.6	519.2	11.39	46.602		
2,600.0	2,553.2	2,529.8	2,513.5	9.3	6.5	148.09	139.0	248.6	557.7	545.8	11.85	47.079		
2,700.0	2,650.8	2,627.8	2,610.8	9.7	6.7	148.36	143.4	259.8	584.4	572.1	12.32	47.439		
2,800.0	2,748.4	2,725.6	2,707.8	10.1	7.0	148.57	147.9	271.4	611.6	598.8	12.79	47.810		
2,900.0	2,846.1	2,825.2	2,806.8	10.5	7.3	148.85	152.2	281.6	637.5	624.3	13.26	48.092		
3,000.0	2,943.7	2,917.6	2,898.5	11.0	7.5	149.09	155.8	291.9	664.3	650.6	13.71	48.438		
3,100.0	3,041.4	3,013.8	2,993.9	11.4	7.8	149.20	161.0	303.0	690.9	676.7	14.21	48.636		
3,200.0	3,139.0	3,106.9	3,086.1	11.8	8.1	149.20	166.8	314.7	718.1	703.4	14.69	48.865		
3,300.0	3,236.6	3,197.9	3,176.3	12.2	8.3	149.30	171.1	325.8	745.5	730.3	15.16	49.168		
3,400.0	3,334.3	3,290.9	3,268.4	12.6	8.6	149.39	175.4	338.1	773.9	758.3	15.64	49.491		
3,500.0	3,431.9	3,399.4	3,375.9	13.0	8.9	149.50	180.5	351.5	801.5	785.3	16.14	49.649		
3,600.0	3,529.6	3,503.4	3,479.2	13.5	9.2	149.64	185.6	362.8	827.7	811.1	16.63	49.782		
3,700.0	3,627.2	3,600.3	3,575.5	13.9	9.5	149.78	190.2	372.8	853.5	836.4	17.10	49.916		
3,800.0	3,724.8	3,699.6	3,674.1	14.3	9.7	149.87	195.6	383.3	879.3	861.7	17.58	50.010		
3,900.0	3,822.5	3,787.6	3,761.4	14.7	10.0	149.94	200.3	392.7	905.2	887.1	18.05	50.155		
4,000.0	3,920.1	3,892.3	3,865.2	15.1	10.3	149.98	206.4	404.8	931.6	913.1	18.56	50.207		
4,100.0	4,017.8	3,982.1	3,954.4	15.5	10.5	150.02	211.7	414.6	957.4	938.4	19.03	50.313		
4,200.0	4,115.4	4,086.8	4,058.2	16.0	10.8	150.06	217.8	426.2	983.6	964.0	19.53	50.354		
4,300.0	4,213.0	4,179.8	4,150.6	16.4	11.1	150.14	222.7	435.9	1,009.2	989.2	19.99	50.477		
4,400.0	4,310.7	4,278.2	4,248.4	16.8	11.3	150.24	227.5	446.1	1,035.0	1,014.6	20.47	50.564		
4,500.0	4,408.3	4,360.3	4,329.8	17.2	11.6	150.28	231.9	455.3	1,061.4	1,040.4	20.92	50.727		
4,600.0	4,505.9	4,467.5	4,436.1	17.6	11.9	150.31	237.7	467.9	1,088.2	1,066.7	21.43	50.771		
4,700.0	4,603.6	4,581.3	4,549.1	18.0	12.2	150.37	244.5	479.4	1,113.3	1,091.3	21.96	50.702		
4,800.0	4,701.2	4,667.9	4,635.0	18.5	12.4	150.36	250.4	488.5	1,138.3	1,115.9	22.44	50.731		
4,900.0	4,798.9	4,765.6	4,731.8	18.9	12.7	150.30	257.9	499.6	1,163.8	1,140.9	22.96	50.680		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-13D - 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	-134.10	-20.8	-21.4	29.8					
100.0	100.0	100.0	100.0	0.1	0.1	-134.10	-20.8	-21.4	29.8	29.5	0.30	100.527		
200.0	200.0	200.0	200.0	0.3	0.3	-134.10	-20.8	-21.4	29.8	29.2	0.65	46.188		
234.1	234.1	234.2	234.2	0.4	0.4	-100.37	-20.9	-21.3	29.8	29.1	0.77	38.894 CC		
300.0	300.0	300.1	300.1	0.5	0.5	-106.18	-21.8	-20.0	30.0	29.0	1.00	29.923 ES		
400.0	399.8	400.3	400.2	0.7	0.7	-124.02	-23.4	-15.4	31.3	29.9	1.38	22.664		
500.0	499.5	499.6	499.1	0.9	0.9	-147.47	-24.3	-7.5	37.3	35.5	1.77	21.006 SF		
600.0	598.7	597.6	596.7	1.2	1.1	-165.95	-24.8	2.2	51.1	48.9	2.13	23.969		
700.0	697.5	695.0	693.5	1.5	1.4	-176.27	-25.2	11.9	71.3	68.8	2.48	28.784		
800.0	795.6	791.5	789.6	1.9	1.6	178.08	-25.7	21.4	96.2	93.3	2.83	34.039		
900.0	893.3	887.4	885.0	2.3	1.8	174.86	-26.2	30.9	123.9	120.7	3.19	38.862		
1,000.0	990.9	983.2	980.4	2.7	2.1	172.82	-26.6	40.4	152.0	148.5	3.56	42.673		
1,100.0	1,088.6	1,079.1	1,075.8	3.1	2.3	171.42	-27.1	49.9	180.2	176.3	3.94	45.740		
1,200.0	1,186.2	1,175.0	1,171.2	3.5	2.5	170.39	-27.6	59.4	208.5	204.2	4.32	48.253		
1,300.0	1,283.8	1,270.8	1,266.5	3.9	2.8	169.62	-28.0	68.9	236.8	232.1	4.70	50.343		
1,400.0	1,381.5	1,366.7	1,361.9	4.3	3.0	169.00	-28.5	78.4	265.2	260.1	5.09	52.108		
1,500.0	1,479.1	1,462.5	1,457.3	4.7	3.2	168.51	-28.9	87.9	293.6	288.1	5.48	53.614		
1,600.0	1,576.8	1,558.4	1,552.7	5.1	3.5	168.10	-29.4	97.4	322.0	316.1	5.86	54.916		
1,700.0	1,674.4	1,654.3	1,648.1	5.5	3.7	167.76	-29.9	106.9	350.4	344.2	6.25	56.050		
1,800.0	1,772.0	1,750.1	1,743.5	6.0	3.9	167.47	-30.3	116.4	378.8	372.2	6.64	57.047		
1,900.0	1,869.7	1,846.0	1,838.9	6.4	4.2	167.22	-30.8	125.9	407.3	400.2	7.03	57.930		
2,000.0	1,967.3	1,941.8	1,934.2	6.8	4.4	167.01	-31.3	135.4	435.7	428.3	7.42	58.717		
2,100.0	2,065.0	2,037.7	2,029.6	7.2	4.6	166.82	-31.7	144.9	464.1	456.3	7.81	59.423		
2,200.0	2,162.6	2,133.5	2,125.0	7.6	4.9	166.65	-32.2	154.4	492.6	484.4	8.20	60.060		
2,300.0	2,260.2	2,229.4	2,220.4	8.0	5.1	166.50	-32.6	163.9	521.0	512.4	8.59	60.638		
2,400.0	2,357.9	2,325.3	2,315.8	8.5	5.3	166.36	-33.1	173.4	549.5	540.5	8.98	61.164		
2,500.0	2,455.5	2,421.1	2,411.2	8.9	5.6	166.24	-33.6	182.9	577.9	568.6	9.38	61.644		
2,600.0	2,553.2	2,517.0	2,506.6	9.3	5.8	166.13	-34.0	192.4	606.4	596.6	9.77	62.085		
2,700.0	2,650.8	2,612.8	2,601.9	9.7	6.1	166.03	-34.5	201.9	634.9	624.7	10.16	62.492		
2,800.0	2,748.4	2,708.7	2,697.3	10.1	6.3	165.94	-35.0	211.4	663.3	652.8	10.55	62.867		
2,900.0	2,846.1	2,804.6	2,792.7	10.5	6.5	165.86	-35.4	220.9	691.8	680.8	10.94	63.215		
3,000.0	2,943.7	2,900.4	2,888.1	11.0	6.8	165.78	-35.9	230.4	720.2	708.9	11.34	63.538		
3,100.0	3,041.4	2,996.3	2,983.5	11.4	7.0	165.71	-36.3	239.9	748.7	737.0	11.73	63.839		
3,200.0	3,139.0	3,092.1	3,078.9	11.8	7.2	165.64	-36.8	249.4	777.2	765.1	12.12	64.120		
3,300.0	3,236.6	3,188.0	3,174.3	12.2	7.5	165.58	-37.3	258.9	805.6	793.1	12.51	64.383		
3,400.0	3,334.3	3,283.9	3,269.6	12.6	7.7	165.53	-37.7	268.5	834.1	821.2	12.91	64.630		
3,500.0	3,431.9	3,379.7	3,365.0	13.0	7.9	165.47	-38.2	278.0	862.6	849.3	13.30	64.861		
3,600.0	3,529.6	3,475.6	3,460.4	13.5	8.2	165.42	-38.6	287.5	891.0	877.4	13.69	65.080		
3,700.0	3,627.2	3,571.4	3,555.8	13.9	8.4	165.37	-39.1	297.0	919.5	905.4	14.08	65.286		
3,800.0	3,724.8	3,667.3	3,651.2	14.3	8.7	165.33	-39.6	306.5	948.0	933.5	14.48	65.480		
3,900.0	3,822.5	3,763.2	3,746.6	14.7	8.9	165.29	-40.0	316.0	976.5	961.6	14.87	65.664		
4,000.0	3,920.1	3,859.0	3,842.0	15.1	9.1	165.25	-40.5	325.5	1,004.9	989.7	15.26	65.838		
4,100.0	4,017.8	3,954.9	3,937.4	15.5	9.4	165.21	-41.0	335.0	1,033.4	1,017.7	15.66	66.004		
4,200.0	4,115.4	4,050.7	4,032.7	16.0	9.6	165.18	-41.4	344.5	1,061.9	1,045.8	16.05	66.161		
4,300.0	4,213.0	4,146.6	4,128.1	16.4	9.8	165.14	-41.9	354.0	1,090.3	1,073.9	16.44	66.311		
4,400.0	4,310.7	4,242.5	4,223.5	16.8	10.1	165.11	-42.3	363.5	1,118.8	1,102.0	16.84	66.453		
4,500.0	4,408.3	4,338.3	4,318.9	17.2	10.3	165.08	-42.8	373.0	1,147.3	1,130.1	17.23	66.589		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-14D - 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 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	-133.92	-13.8	-14.4	20.0					
100.0	100.0	100.0	100.0	0.1	0.1	-133.92	-13.8	-14.4	20.0	19.7	0.30	67.252		
200.0	200.0	200.0	200.0	0.3	0.3	-133.92	-13.8	-14.4	20.0	19.3	0.65	30.900	CC, ES	
300.0	300.0	299.8	299.8	0.5	0.5	-99.54	-13.0	-15.9	20.7	19.7	1.00	20.693		
400.0	399.8	399.6	399.4	0.7	0.7	-99.84	-10.4	-20.4	23.0	21.6	1.39	16.579		
500.0	499.5	499.3	498.7	0.9	0.9	-100.23	-6.1	-27.9	26.9	25.0	1.83	14.650		
600.0	598.7	599.0	597.8	1.2	1.2	-101.45	-0.2	-38.0	32.1	29.8	2.34	13.712		
700.0	697.5	698.7	696.8	1.5	1.4	-106.84	5.7	-48.4	38.4	35.5	2.90	13.216	SF	
800.0	795.6	798.3	795.6	1.9	1.7	-114.68	11.7	-58.8	46.2	42.7	3.48	13.267		
900.0	893.3	897.5	894.1	2.3	2.0	-122.43	17.7	-69.1	55.9	51.9	4.03	13.896		
1,000.0	990.9	996.8	992.7	2.7	2.2	-127.92	23.6	-79.5	66.5	61.9	4.54	14.629		
1,100.0	1,088.6	1,096.1	1,091.3	3.1	2.5	-131.88	29.6	-89.9	77.4	72.4	5.05	15.343		
1,200.0	1,186.2	1,195.4	1,189.8	3.5	2.8	-134.85	35.6	-100.2	88.6	83.1	5.54	16.003		
1,300.0	1,283.8	1,294.6	1,288.4	3.9	3.0	-137.15	41.5	-110.6	100.1	94.0	6.03	16.600		
1,400.0	1,381.5	1,393.9	1,386.9	4.3	3.3	-138.98	47.5	-120.9	111.6	105.1	6.51	17.136		
1,500.0	1,479.1	1,493.2	1,485.5	4.7	3.6	-140.46	53.5	-131.3	123.2	116.2	7.00	17.616		
1,600.0	1,576.8	1,592.5	1,584.0	5.1	3.8	-141.69	59.4	-141.6	134.9	127.5	7.48	18.046		
1,700.0	1,674.4	1,691.7	1,682.6	5.5	4.1	-142.72	65.4	-152.0	146.7	138.7	7.96	18.434		
1,800.0	1,772.0	1,791.0	1,781.1	6.0	4.4	-143.60	71.3	-162.4	158.5	150.1	8.44	18.784		
1,900.0	1,869.7	1,890.3	1,879.7	6.4	4.6	-144.36	77.3	-172.7	170.3	161.4	8.92	19.101		
2,000.0	1,967.3	1,989.6	1,978.2	6.8	4.9	-145.02	83.3	-183.1	182.2	172.8	9.40	19.390		
2,100.0	2,065.0	2,088.8	2,076.8	7.2	5.2	-145.59	89.2	-193.4	194.0	184.2	9.87	19.653		
2,200.0	2,162.6	2,188.1	2,175.3	7.6	5.5	-146.10	95.2	-203.8	205.9	195.6	10.35	19.894		
2,300.0	2,260.2	2,287.4	2,273.9	8.0	5.7	-146.56	101.2	-214.2	217.8	207.0	10.83	20.116		
2,400.0	2,357.9	2,386.7	2,372.4	8.5	6.0	-146.97	107.1	-224.5	229.7	218.4	11.31	20.320		
2,500.0	2,455.5	2,485.9	2,471.0	8.9	6.3	-147.34	113.1	-234.9	241.7	229.9	11.78	20.509		
2,600.0	2,553.2	2,585.2	2,569.5	9.3	6.5	-147.67	119.0	-245.2	253.6	241.3	12.26	20.684		
2,700.0	2,650.8	2,684.5	2,668.1	9.7	6.8	-147.97	125.0	-255.6	265.5	252.8	12.74	20.847		
2,800.0	2,748.4	2,783.8	2,766.7	10.1	7.1	-148.25	131.0	-265.9	277.5	264.3	13.22	20.998		
2,900.0	2,846.1	2,883.0	2,865.2	10.5	7.4	-148.50	136.9	-276.3	289.5	275.8	13.69	21.140		
3,000.0	2,943.7	2,982.3	2,963.8	11.0	7.6	-148.74	142.9	-286.7	301.4	287.2	14.17	21.272		
3,100.0	3,041.4	3,081.6	3,062.3	11.4	7.9	-148.95	148.8	-297.0	313.4	298.7	14.65	21.396		
3,200.0	3,139.0	3,180.9	3,160.9	11.8	8.2	-149.15	154.8	-307.4	325.3	310.2	15.12	21.513		
3,300.0	3,236.6	3,280.1	3,259.4	12.2	8.4	-149.34	160.8	-317.7	337.3	321.7	15.60	21.623		
3,400.0	3,334.3	3,379.4	3,358.0	12.6	8.7	-149.51	166.7	-328.1	349.3	333.2	16.08	21.726		
3,500.0	3,431.9	3,478.7	3,456.5	13.0	9.0	-149.68	172.7	-338.5	361.3	344.7	16.55	21.824		
3,600.0	3,529.6	3,578.0	3,555.1	13.5	9.3	-149.83	178.7	-348.8	373.3	356.2	17.03	21.917		
3,700.0	3,627.2	3,677.2	3,653.6	13.9	9.5	-149.97	184.6	-359.2	385.2	367.7	17.51	22.004		
3,800.0	3,724.8	3,776.5	3,752.2	14.3	9.8	-150.10	190.6	-369.5	397.2	379.2	17.98	22.088		
3,900.0	3,822.5	3,875.8	3,850.7	14.7	10.1	-150.23	196.5	-379.9	409.2	390.8	18.46	22.167		
4,000.0	3,920.1	3,975.1	3,949.3	15.1	10.4	-150.35	202.5	-390.2	421.2	402.3	18.94	22.242		
4,100.0	4,017.8	4,074.3	4,047.8	15.5	10.6	-150.46	208.5	-400.6	433.2	413.8	19.41	22.313		
4,200.0	4,115.4	4,173.6	4,146.4	16.0	10.9	-150.56	214.4	-411.0	445.2	425.3	19.89	22.381		
4,300.0	4,213.0	4,272.9	4,244.9	16.4	11.2	-150.66	220.4	-421.3	457.2	436.8	20.37	22.446		
4,400.0	4,310.7	4,372.2	4,343.5	16.8	11.4	-150.76	226.4	-431.7	469.2	448.3	20.84	22.509		
4,500.0	4,408.3	4,471.4	4,442.1	17.2	11.7	-150.85	232.3	-442.0	481.2	459.9	21.32	22.568		
4,600.0	4,505.9	4,570.7	4,540.6	17.6	12.0	-150.94	238.3	-452.4	493.2	471.4	21.80	22.625		
4,700.0	4,603.6	4,670.0	4,639.2	18.0	12.3	-151.02	244.2	-462.8	505.2	482.9	22.27	22.679		
4,800.0	4,701.2	4,769.3	4,737.7	18.5	12.5	-151.10	250.2	-473.1	517.2	494.4	22.75	22.732		
4,900.0	4,798.9	4,868.5	4,836.3	18.9	12.8	-151.17	256.2	-483.5	529.2	505.9	23.23	22.782		
5,000.0	4,896.5	4,967.8	4,934.8	19.3	13.1	-151.24	262.1	-493.8	541.2	517.5	23.70	22.830		
5,100.0	4,994.1	5,067.1	5,033.4	19.7	13.3	-151.31	268.1	-504.2	553.2	529.0	24.18	22.877		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-14D - 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 Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,091.8	5,166.4	5,131.9	20.1	13.6	-151.38	274.1	-514.5	565.2	540.5	24.66	22.921		
5,300.0	5,189.4	5,265.6	5,230.5	20.6	13.9	-151.44	280.0	-524.9	577.2	552.0	25.13	22.964		
5,400.0	5,287.1	5,364.9	5,329.0	21.0	14.2	-151.50	286.0	-535.3	589.2	563.6	25.61	23.005		
5,500.0	5,384.7	5,464.2	5,427.6	21.4	14.4	-151.56	291.9	-545.6	601.2	575.1	26.09	23.045		
5,600.0	5,482.3	5,563.5	5,526.1	21.8	14.7	-151.61	297.9	-556.0	613.2	586.6	26.56	23.084		
5,700.0	5,580.0	5,662.7	5,624.7	22.2	15.0	-151.67	303.9	-566.3	625.2	598.2	27.04	23.121		
5,800.0	5,677.6	5,762.0	5,723.2	22.6	15.2	-151.72	309.8	-576.7	637.2	609.7	27.52	23.157		
5,900.0	5,775.3	5,861.3	5,821.8	23.1	15.5	-151.77	315.8	-587.0	649.2	621.2	27.99	23.191		
6,000.0	5,873.1	5,960.7	5,920.4	23.4	15.8	-151.85	321.8	-597.4	660.3	631.9	28.48	23.187		
6,100.0	5,971.6	6,060.3	6,019.4	23.8	16.1	-151.79	327.7	-607.8	668.5	639.5	28.98	23.065		
6,200.0	6,070.6	6,160.1	6,118.5	24.0	16.3	-151.57	333.7	-618.2	673.5	644.0	29.50	22.828		
6,300.0	6,170.1	6,249.6	6,207.3	24.2	16.5	-151.30	338.6	-626.7	676.2	646.3	29.96	22.569		
6,400.0	6,269.9	6,337.4	6,294.9	24.4	16.7	-151.09	342.1	-632.7	677.7	647.3	30.34	22.335		
6,500.0	6,369.8	6,425.3	6,382.7	24.5	16.9	-150.92	344.2	-636.4	677.8	647.2	30.64	22.119		
6,600.0	6,469.8	6,513.3	6,470.7	24.6	17.0	-65.36	345.0	-637.7	677.1	646.2	30.90	21.912		
6,700.0	6,569.8	6,610.2	6,567.6	24.7	17.1	-65.40	344.8	-638.0	676.9	645.7	31.16	21.723		
6,784.4	6,654.2	6,693.1	6,650.5	24.7	17.2	-65.41	344.3	-638.8	676.8	645.4	31.40	21.557		
6,800.0	6,669.8	6,708.7	6,666.1	24.8	17.2	-65.41	344.2	-639.0	676.8	645.4	31.44	21.526		
6,900.0	6,769.8	6,808.7	6,766.1	24.8	17.3	-65.41	343.6	-640.1	676.8	645.1	31.73	21.330		
7,000.0	6,869.8	6,908.7	6,866.1	24.9	17.5	-65.41	342.9	-641.3	676.8	644.8	32.02	21.137		
7,100.0	6,969.8	7,008.7	6,966.1	25.0	17.6	-65.41	342.3	-642.4	676.8	644.5	32.31	20.946		
7,200.0	7,069.7	7,108.7	7,066.1	25.1	17.7	-65.41	341.6	-643.5	676.8	644.2	32.61	20.758		
7,300.0	7,169.7	7,208.7	7,166.1	25.2	17.9	-65.41	341.0	-644.7	676.8	643.9	32.90	20.572		
7,400.0	7,269.7	7,308.7	7,266.1	25.3	18.0	-65.41	340.3	-645.8	676.8	643.6	33.19	20.389		
7,500.0	7,369.7	7,408.7	7,366.1	25.4	18.1	-65.41	339.7	-646.9	676.8	643.3	33.49	20.209		
7,600.0	7,469.7	7,508.7	7,466.0	25.5	18.3	-65.41	339.0	-648.0	676.8	643.0	33.79	20.031		
7,700.0	7,569.7	7,608.7	7,566.0	25.6	18.4	-65.41	338.4	-649.2	676.8	642.7	34.09	19.856		
7,800.0	7,669.7	7,708.7	7,666.0	25.7	18.5	-65.41	337.7	-650.3	676.8	642.4	34.39	19.683		
7,900.0	7,769.7	7,808.7	7,766.0	25.8	18.7	-65.41	337.1	-651.4	676.8	642.1	34.69	19.513		
8,000.0	7,869.7	7,908.7	7,866.0	25.8	18.8	-65.41	336.4	-652.6	676.8	641.8	34.99	19.345		
8,100.0	7,969.7	8,008.7	7,966.0	25.9	18.9	-65.41	335.8	-653.7	676.8	641.5	35.29	19.179		
8,200.0	8,069.7	8,108.7	8,066.0	26.0	19.1	-65.41	335.1	-654.8	676.8	641.2	35.59	19.016		
8,300.0	8,169.7	8,208.7	8,166.0	26.1	19.2	-65.41	334.5	-655.9	676.8	640.9	35.90	18.855		
8,400.0	8,269.6	8,308.7	8,266.0	26.2	19.3	-65.41	333.8	-657.1	676.8	640.6	36.20	18.696		
8,500.0	8,369.6	8,408.7	8,366.0	26.3	19.5	-65.41	333.2	-658.2	676.8	640.3	36.51	18.539		
8,600.0	8,469.6	8,508.7	8,466.0	26.4	19.6	-65.41	332.5	-659.3	676.8	640.0	36.81	18.385		
8,700.0	8,569.6	8,608.7	8,566.0	26.5	19.8	-65.41	331.9	-660.5	676.8	639.7	37.12	18.233		
8,800.0	8,669.6	8,708.7	8,665.9	26.6	19.9	-65.41	331.2	-661.6	676.8	639.4	37.43	18.083		
8,900.0	8,769.6	8,808.7	8,765.9	26.7	20.0	-65.41	330.6	-662.7	676.8	639.1	37.74	17.935		
9,000.0	8,869.6	8,908.7	8,865.9	26.8	20.2	-65.41	329.9	-663.8	676.8	638.8	38.05	17.789		
9,100.0	8,969.6	9,008.7	8,965.9	27.0	20.3	-65.41	329.3	-665.0	676.8	638.5	38.36	17.645		
9,200.0	9,069.6	9,108.7	9,065.9	27.1	20.5	-65.41	328.6	-666.1	676.8	638.1	38.67	17.503		
9,300.0	9,169.6	9,208.7	9,165.9	27.2	20.6	-65.41	328.0	-667.2	676.8	637.8	38.98	17.363		
9,400.0	9,269.6	9,308.7	9,265.9	27.3	20.8	-65.41	327.3	-668.3	676.8	637.5	39.29	17.225		
9,500.0	9,369.6	9,408.7	9,365.9	27.4	20.9	-65.41	326.7	-669.5	676.8	637.2	39.61	17.089		
9,600.0	9,469.5	9,508.7	9,465.9	27.5	21.0	-65.41	326.0	-670.6	676.8	636.9	39.92	16.955		
9,697.5	9,567.0	9,606.2	9,563.3	27.6	21.2	-65.41	325.4	-671.7	676.8	636.6	40.23	16.826		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-15D - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 200-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	10.0	10.0	0.0	0.0	-134.36	-6.9	-7.1	9.9					
100.0	100.0	109.9	109.9	0.1	0.2	-128.46	-6.4	-8.1	10.4	10.0	0.32	32.779		
200.0	200.0	209.7	209.7	0.3	0.3	-115.51	-5.2	-10.9	12.1	11.5	0.64	18.845		
300.0	300.0	309.5	309.3	0.5	0.6	-69.04	-2.1	-15.6	15.1	14.0	1.02	14.721		
400.0	399.8	409.2	408.6	0.7	0.8	-62.36	3.5	-22.2	18.4	17.0	1.42	13.028		
500.0	499.5	508.9	507.6	0.9	1.1	-60.21	11.0	-30.8	22.1	20.2	1.85	11.950		
600.0	598.7	608.9	606.8	1.2	1.3	-62.15	20.0	-39.8	24.2	21.9	2.35	10.297		
700.0	697.5	708.9	705.8	1.5	1.6	-66.53	31.0	-48.8	24.7	21.7	2.96	8.346		
800.0	795.6	808.7	804.3	1.9	2.0	-74.27	43.6	-58.5	24.4	20.7	3.71	6.569		
838.4	833.1	847.0	842.0	2.0	2.1	-77.50	49.0	-62.5	24.3	20.3	4.02	6.042		
900.0	893.3	908.3	902.3	2.3	2.3	-82.66	57.9	-69.5	24.6	20.1	4.53	5.439		
1,000.0	990.9	1,008.0	1,000.3	2.7	2.7	-90.12	71.9	-81.7	26.6	21.3	5.32	5.008		
1,100.0	1,088.6	1,108.1	1,099.1	3.1	3.0	-101.31	83.8	-92.5	29.3	23.3	6.03	4.871		
1,200.0	1,186.2	1,208.1	1,197.8	3.5	3.3	-110.76	96.4	-102.7	32.1	25.5	6.61	4.851 SF		
1,300.0	1,283.8	1,308.3	1,296.4	3.9	3.7	-117.78	109.8	-112.9	34.8	27.7	7.12	4.893		
1,400.0	1,381.5	1,408.1	1,394.8	4.3	4.0	-123.08	123.7	-123.3	37.7	30.1	7.60	4.961		
1,500.0	1,479.1	1,507.4	1,492.7	4.7	4.3	-128.01	136.6	-133.6	41.6	33.6	7.99	5.207		
1,600.0	1,576.8	1,606.2	1,590.3	5.1	4.6	-132.92	147.4	-143.7	47.8	39.5	8.30	5.758		
1,700.0	1,674.4	1,705.3	1,688.5	5.5	4.9	-137.02	156.6	-153.7	55.9	47.3	8.58	6.512		
1,800.0	1,772.0	1,805.5	1,787.8	6.0	5.2	-140.40	166.0	-163.5	64.0	55.2	8.87	7.221		
1,900.0	1,869.7	1,905.2	1,886.6	6.4	5.5	-143.50	175.9	-172.6	71.8	62.7	9.13	7.865		
2,000.0	1,967.3	2,004.5	1,985.0	6.8	5.8	-145.97	185.6	-181.6	79.9	70.5	9.41	8.490		
2,100.0	2,065.0	2,103.9	2,083.5	7.2	6.1	-147.83	194.7	-190.9	88.7	79.0	9.73	9.119		
2,200.0	2,162.6	2,204.1	2,182.8	7.6	6.4	-148.94	204.4	-201.0	97.0	86.9	10.11	9.592		
2,300.0	2,260.2	2,305.1	2,282.7	8.0	6.7	-149.74	214.7	-211.5	104.8	94.3	10.53	9.958		
2,400.0	2,357.9	2,404.5	2,381.0	8.5	7.0	-150.53	225.4	-221.7	112.0	101.1	10.92	10.259		
2,500.0	2,455.5	2,506.4	2,481.6	8.9	7.4	-151.26	237.6	-232.1	118.2	106.8	11.32	10.435		
2,600.0	2,553.2	2,605.4	2,579.3	9.3	7.7	-151.61	249.6	-243.0	124.0	112.2	11.77	10.533		
2,700.0	2,650.8	2,705.8	2,678.4	9.7	8.0	-151.93	261.6	-254.0	130.1	117.8	12.22	10.642		
2,800.0	2,748.4	2,806.1	2,777.1	10.1	8.4	-151.96	274.7	-265.6	134.9	122.2	12.71	10.614		
2,900.0	2,846.1	2,903.4	2,873.3	10.5	8.7	-152.36	285.6	-275.9	141.7	128.5	13.12	10.796		
3,000.0	2,943.7	3,006.3	2,974.9	11.0	9.0	-153.14	297.9	-285.8	148.0	134.5	13.48	10.977		
3,100.0	3,041.4	3,107.8	3,074.8	11.4	9.4	-153.43	312.1	-296.9	151.9	138.0	13.92	10.916		
3,200.0	3,139.0	3,204.8	3,170.3	11.8	9.7	-153.55	325.0	-307.9	156.7	142.3	14.37	10.904		
3,300.0	3,236.6	3,303.9	3,268.2	12.2	10.0	-153.98	336.5	-317.9	163.2	148.4	14.76	11.056		
3,400.0	3,334.3	3,401.3	3,364.5	12.6	10.4	-154.29	347.7	-328.1	169.7	154.6	15.16	11.193		
3,500.0	3,431.9	3,503.0	3,465.1	13.0	10.7	-154.69	358.3	-338.1	177.5	162.0	15.56	11.411		
3,600.0	3,529.6	3,606.5	3,567.2	13.5	11.0	-155.04	371.4	-348.9	183.0	167.0	15.96	11.466		
3,700.0	3,627.2	3,703.3	3,662.7	13.9	11.3	-155.43	384.0	-358.7	188.1	171.8	16.33	11.519		
3,800.0	3,724.8	3,805.4	3,763.5	14.3	11.7	-155.82	396.6	-368.9	194.0	177.3	16.71	11.611		
3,900.0	3,822.5	3,907.0	3,863.6	14.7	12.1	-155.95	410.3	-380.1	198.5	181.4	17.15	11.575		
4,000.0	3,920.1	4,006.2	3,961.1	15.1	12.4	-156.00	423.8	-391.3	202.8	185.2	17.60	11.524		
4,100.0	4,017.8	4,103.6	4,057.0	15.5	12.7	-155.76	436.2	-403.2	208.0	189.8	18.14	11.466		
4,200.0	4,115.4	4,200.4	4,152.4	16.0	13.1	-155.32	447.0	-415.6	214.5	195.7	18.72	11.458		
4,300.0	4,213.0	4,297.8	4,248.6	16.4	13.4	-155.12	457.1	-427.1	221.9	202.7	19.23	11.537		
4,400.0	4,310.7	4,394.4	4,344.3	16.8	13.7	-155.13	465.3	-437.4	231.5	211.8	19.69	11.755		
4,500.0	4,408.3	4,502.5	4,451.2	17.2	14.0	-155.46	477.3	-448.1	238.5	218.4	20.08	11.877		
4,600.0	4,505.9	4,600.1	4,547.6	17.6	14.3	-155.86	489.0	-457.3	244.8	224.4	20.41	11.990		
4,700.0	4,603.6	4,696.7	4,643.3	18.0	14.6	-156.32	499.5	-465.9	252.4	231.6	20.73	12.172		
4,800.0	4,701.2	4,796.5	4,742.1	18.5	14.9	-156.49	509.2	-475.8	260.8	239.6	21.15	12.330		
4,900.0	4,798.9	4,897.3	4,841.7	18.9	15.2	-156.34	519.5	-487.4	268.4	246.8	21.66	12.394		
5,000.0	4,896.5	4,997.1	4,940.5	19.3	15.5	-156.44	529.9	-497.8	276.2	254.1	22.08	12.511		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 200-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	4,994.1	5,101.6	5,043.8	19.7	15.9	-156.82	541.7	-507.4	283.2	260.8	22.42	12.631		
5,200.0	5,091.8	5,203.4	5,144.3	20.1	16.2	-157.08	554.8	-517.5	288.6	265.8	22.79	12.662		
5,300.0	5,189.4	5,296.6	5,236.3	20.6	16.5	-157.41	566.3	-526.2	294.7	271.6	23.12	12.749		
5,400.0	5,287.1	5,401.7	5,340.4	21.0	16.8	-157.84	578.0	-535.3	302.1	278.7	23.43	12.896		
5,500.0	5,384.7	5,509.7	5,446.9	21.4	17.2	-158.28	593.3	-545.3	306.4	282.7	23.73	12.910		
5,600.0	5,482.3	5,606.2	5,541.7	21.8	17.6	-158.38	607.2	-555.9	310.0	285.9	24.15	12.835		
5,700.0	5,580.0	5,704.0	5,637.9	22.2	17.9	-158.16	619.9	-568.0	314.7	290.0	24.68	12.751		
5,800.0	5,677.6	5,803.5	5,735.9	22.6	18.3	-157.97	632.5	-580.2	319.8	294.6	25.20	12.689		
5,900.0	5,775.3	5,895.0	5,826.0	23.1	18.6	-157.93	644.1	-590.6	325.2	299.5	25.64	12.680		
6,000.0	5,873.1	5,990.0	5,920.0	23.4	18.8	-157.91	653.5	-600.5	332.4	306.3	26.10	12.738		
6,100.0	5,971.6	6,081.5	6,010.9	23.8	19.0	-157.95	660.2	-608.2	339.5	313.0	26.47	12.825		
6,200.0	6,070.6	6,180.0	6,109.0	24.0	19.3	-158.09	667.5	-614.3	343.7	317.0	26.78	12.834		
6,300.0	6,170.1	6,275.0	6,203.6	24.2	19.5	-157.92	673.6	-620.7	345.6	318.4	27.19	12.710		
6,400.0	6,269.9	6,370.0	6,298.2	24.4	19.7	-157.29	677.8	-628.0	346.1	318.3	27.75	12.470		
6,500.0	6,369.8	6,468.0	6,395.8	24.5	19.9	-156.14	680.7	-636.8	344.5	316.0	28.49	12.090		
6,600.0	6,469.8	6,560.0	6,487.4	24.6	20.1	-69.56	683.3	-644.3	340.6	311.4	29.19	11.666		
6,666.6	6,536.4	6,617.3	6,544.6	24.6	20.1	-69.14	683.8	-647.3	339.4	309.8	29.55	11.486		
6,700.0	6,569.8	6,643.8	6,571.1	24.7	20.2	-69.01	683.3	-648.3	339.7	310.0	29.69	11.444		
6,800.0	6,669.8	6,741.3	6,668.5	24.8	20.2	-68.63	679.5	-651.2	342.6	312.4	30.15	11.363		
6,900.0	6,769.8	6,844.4	6,771.5	24.8	20.3	-68.29	676.1	-654.0	345.0	314.4	30.59	11.278		
7,000.0	6,869.8	6,943.0	6,870.0	24.9	20.4	-68.05	673.2	-656.3	347.1	316.1	30.99	11.199		
7,100.0	6,969.8	7,053.2	6,980.2	25.0	20.6	-67.77	671.5	-659.1	347.8	316.3	31.43	11.066		
7,200.0	7,069.7	7,152.9	7,079.8	25.1	20.7	-67.42	671.2	-662.4	347.1	315.2	31.88	10.889		
7,300.0	7,169.7	7,252.8	7,179.6	25.2	20.8	-67.00	670.5	-666.1	346.9	314.6	32.35	10.723		
7,400.0	7,269.7	7,357.1	7,283.9	25.3	21.0	-66.84	671.2	-668.4	345.4	312.7	32.72	10.557		
7,500.0	7,369.7	7,455.5	7,382.3	25.4	21.1	-66.80	671.8	-669.9	344.1	311.1	33.03	10.419		
7,600.0	7,469.7	7,556.1	7,482.9	25.5	21.2	-66.72	672.6	-671.7	342.6	309.2	33.37	10.265		
7,700.0	7,569.7	7,655.2	7,581.9	25.6	21.4	-66.63	673.0	-673.5	341.4	307.7	33.71	10.129		
7,800.0	7,669.7	7,756.1	7,682.9	25.7	21.5	-66.44	673.6	-675.9	340.1	306.0	34.09	9.975		
7,900.0	7,769.7	7,853.0	7,779.8	25.8	21.6	-66.32	674.1	-677.8	338.9	304.4	34.44	9.840		
7,933.1	7,802.8	7,884.3	7,811.0	25.8	21.7	-66.26	673.9	-678.5	338.8	304.2	34.56	9.802		
8,000.0	7,869.7	7,950.6	7,877.3	25.8	21.8	-66.11	673.3	-680.2	338.9	304.1	34.83	9.731		
8,100.0	7,969.7	8,051.1	7,977.8	25.9	21.9	-65.81	672.3	-683.0	339.0	303.8	35.25	9.617		
8,200.0	8,069.7	8,150.0	8,076.6	26.0	22.0	-65.49	671.4	-686.0	339.1	303.4	35.68	9.505		
8,300.0	8,169.7	8,250.3	8,176.8	26.1	22.1	-65.29	670.2	-688.3	339.5	303.5	36.06	9.416		
8,400.0	8,269.6	8,351.6	8,278.2	26.2	22.3	-65.10	669.3	-690.5	339.6	303.2	36.45	9.319		
8,463.1	8,332.7	8,414.3	8,340.8	26.3	22.4	-64.88	668.9	-692.5	339.6	302.8	36.72	9.246		
8,500.0	8,369.6	8,450.7	8,377.1	26.3	22.4	-64.76	668.6	-693.7	339.6	302.7	36.89	9.207		
8,600.0	8,469.6	8,551.1	8,477.6	26.4	22.5	-64.49	667.6	-696.4	339.8	302.5	37.29	9.111		
8,700.0	8,569.6	8,654.1	8,580.5	26.5	22.7	-64.34	667.2	-698.5	339.4	301.7	37.66	9.013		
8,777.8	8,647.4	8,729.1	8,655.4	26.6	22.8	-64.22	667.0	-700.0	339.1	301.1	37.94	8.938		
8,800.0	8,669.6	8,751.0	8,677.4	26.6	22.8	-64.19	666.8	-700.5	339.1	301.1	38.02	8.920		
8,900.0	8,769.6	8,854.7	8,781.1	26.7	22.9	-63.98	666.5	-702.9	338.7	300.3	38.41	8.817		
9,000.0	8,869.6	8,953.7	8,880.0	26.8	23.1	-63.69	666.6	-705.8	337.9	299.0	38.83	8.701		
9,100.0	8,969.6	9,053.6	8,979.9	27.0	23.2	-63.47	666.7	-708.3	337.0	297.8	39.21	8.595		
9,139.7	9,009.3	9,091.1	9,017.3	27.0	23.3	-63.42	666.5	-709.0	336.9	297.5	39.35	8.561		
9,200.0	9,069.6	9,148.8	9,075.1	27.1	23.3	-63.35	665.8	-710.0	337.2	297.6	39.56	8.524		
9,300.0	9,169.6	9,248.8	9,175.0	27.2	23.5	-63.24	664.4	-711.8	337.9	298.0	39.91	8.468		
9,400.0	9,269.6	9,255.0	9,181.2	27.3	23.5	-63.23	664.3	-711.9	351.4	311.4	40.07	8.770		
9,500.0	9,369.6	9,255.0	9,181.2	27.4	23.5	-63.23	664.3	-711.9	390.9	350.6	40.22	9.717		
9,600.0	9,469.5	9,255.0	9,181.2	27.5	23.5	-63.23	664.3	-711.9	449.5	409.1	40.38	11.132		
9,697.5	9,567.0	9,255.0	9,181.2	27.6	23.5	-63.23	664.3	-711.9	518.9	478.4	40.53	12.804		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-3D - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 170-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	10.0	10.0	0.0	0.0	-134.38	-48.8	-49.9	69.8					
100.0	100.0	109.7	109.7	0.1	0.2	-134.24	-48.9	-50.2	70.0	69.7	0.31	227.251 ES		
200.0	200.0	208.8	208.8	0.3	0.3	-133.82	-49.1	-51.1	70.9	70.3	0.64	111.052		
300.0	300.0	305.5	305.4	0.5	0.5	-99.48	-50.7	-54.8	75.1	74.1	0.99	76.024		
400.0	399.8	403.1	402.8	0.7	0.7	-101.25	-53.8	-61.3	83.0	81.6	1.36	61.143		
500.0	499.5	498.7	497.8	0.9	0.9	-104.49	-59.5	-70.1	95.5	93.8	1.75	54.431		
600.0	598.7	593.6	591.7	1.2	1.2	-108.47	-67.4	-80.7	112.6	110.4	2.19	51.404		
700.0	697.5	686.8	683.5	1.5	1.5	-113.09	-78.8	-92.0	135.1	132.5	2.66	50.868 SF		
800.0	795.6	780.7	775.9	1.9	1.8	-118.30	-92.6	-101.7	161.5	158.3	3.15	51.262		
900.0	893.3	875.9	869.4	2.3	2.2	-123.25	-107.6	-111.0	191.0	187.3	3.65	52.281		
1,000.0	990.9	973.4	965.4	2.7	2.5	-127.20	-122.1	-119.9	220.5	216.3	4.16	53.037		
1,100.0	1,088.6	1,069.0	1,059.7	3.1	2.8	-129.89	-135.0	-129.3	249.7	245.0	4.67	53.502		
1,200.0	1,186.2	1,166.2	1,155.5	3.5	3.1	-131.99	-148.0	-139.2	279.2	274.0	5.18	53.896		
1,300.0	1,283.8	1,262.8	1,250.9	3.9	3.5	-133.67	-159.9	-148.8	307.9	302.2	5.69	54.120		
1,400.0	1,381.5	1,359.6	1,346.5	4.3	3.8	-135.05	-171.8	-158.6	336.8	330.6	6.20	54.299		
1,500.0	1,479.1	1,462.2	1,447.9	4.7	4.1	-136.32	-183.4	-168.4	364.9	358.2	6.72	54.331		
1,600.0	1,576.8	1,561.5	1,546.4	5.1	4.3	-137.70	-193.3	-175.7	391.6	384.4	7.20	54.419		
1,700.0	1,674.4	1,666.5	1,650.8	5.5	4.6	-139.13	-202.4	-182.0	417.1	409.4	7.68	54.325		
1,800.0	1,772.0	1,764.2	1,748.2	6.0	4.8	-140.35	-209.9	-187.4	441.7	433.5	8.13	54.298		
1,900.0	1,869.7	1,857.6	1,841.2	6.4	5.0	-141.45	-216.8	-192.2	466.3	457.7	8.57	54.390		
2,000.0	1,967.3	1,957.2	1,940.4	6.8	5.3	-142.55	-224.6	-196.9	491.3	482.3	9.02	54.471		
2,100.0	2,065.0	2,059.3	2,042.0	7.2	5.5	-143.44	-231.4	-202.8	515.4	505.9	9.48	54.353		
2,200.0	2,162.6	2,147.4	2,129.7	7.6	5.7	-144.01	-237.5	-209.1	539.9	530.0	9.93	54.351		
2,300.0	2,260.2	2,248.0	2,229.6	8.0	6.0	-144.48	-245.4	-217.5	565.3	554.9	10.44	54.172		
2,400.0	2,357.9	2,337.9	2,318.8	8.5	6.3	-144.71	-251.7	-226.5	590.1	579.1	10.93	53.972		
2,500.0	2,455.5	2,416.4	2,396.4	8.9	6.5	-144.73	-259.7	-236.1	617.8	606.3	11.42	54.094		
2,600.0	2,553.2	2,509.6	2,488.2	9.3	6.9	-144.74	-270.2	-247.5	646.5	634.6	11.94	54.147		
2,700.0	2,650.8	2,591.8	2,569.2	9.7	7.1	-144.79	-280.7	-257.1	676.7	664.3	12.43	54.463		
2,800.0	2,748.4	2,689.4	2,665.1	10.1	7.5	-144.81	-293.8	-269.0	707.6	694.6	12.96	54.580		
2,900.0	2,846.1	2,788.7	2,763.0	10.5	7.8	-144.86	-306.6	-280.7	737.9	724.4	13.49	54.705		
3,000.0	2,943.7	2,870.0	2,843.0	11.0	8.1	-144.93	-317.4	-289.8	768.6	754.7	13.97	55.015		
3,100.0	3,041.4	2,958.4	2,929.9	11.4	8.5	-144.94	-330.2	-300.4	800.6	786.1	14.49	55.266		
3,200.0	3,139.0	3,056.2	3,025.7	11.8	8.8	-144.95	-345.1	-312.3	833.1	818.1	15.02	55.484		
3,300.0	3,236.6	3,149.7	3,117.5	12.2	9.2	-144.94	-359.1	-323.9	865.4	849.9	15.55	55.649		
3,400.0	3,334.3	3,243.1	3,208.9	12.6	9.6	-144.86	-373.2	-336.5	897.9	881.8	16.10	55.785		
3,500.0	3,431.9	3,331.4	3,295.4	13.0	9.9	-144.80	-386.9	-348.3	930.8	914.1	16.62	56.011		
3,600.0	3,529.6	3,424.0	3,386.0	13.5	10.3	-144.78	-401.7	-360.0	964.1	946.9	17.14	56.232		
3,700.0	3,627.2	3,516.4	3,476.5	13.9	10.6	-144.77	-416.6	-371.6	997.5	979.8	17.67	56.444		
3,800.0	3,724.8	3,612.5	3,570.6	14.3	11.0	-144.75	-432.1	-383.7	1,030.9	1,012.7	18.21	56.618		
3,900.0	3,822.5	3,723.9	3,679.7	14.7	11.4	-144.73	-449.2	-397.8	1,063.6	1,044.8	18.79	56.601		
4,000.0	3,920.1	3,830.4	3,784.4	15.1	11.8	-144.72	-463.8	-411.2	1,094.7	1,075.4	19.36	56.559		
4,100.0	4,017.8	3,914.2	3,866.8	15.5	12.1	-144.72	-475.4	-421.5	1,126.1	1,106.2	19.86	56.708		
4,200.0	4,115.4	4,009.3	3,960.1	16.0	12.5	-144.74	-489.1	-432.8	1,157.8	1,137.4	20.38	56.810		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-5D - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-134.34	-35.0	-35.8	50.0					
100.0	100.0	100.0	100.0	0.1	0.1	-134.34	-35.0	-35.8	50.0	49.7	0.30	168.666		
200.0	200.0	200.0	200.0	0.3	0.3	-134.34	-35.0	-35.8	50.0	49.4	0.65	77.495		
284.4	284.4	284.7	284.7	0.5	0.5	-102.63	-35.6	-34.7	50.0	49.0	0.95	52.808 CC		
300.0	300.0	300.3	300.3	0.5	0.5	-103.76	-35.9	-34.3	50.0	49.0	1.00	49.867 ES		
400.0	399.8	400.0	399.8	0.7	0.7	-115.18	-38.5	-29.8	51.2	49.8	1.39	36.905		
500.0	499.5	498.3	497.7	0.9	0.9	-131.58	-42.8	-22.4	57.4	55.6	1.80	31.880 SF		
600.0	598.7	594.5	593.3	1.2	1.2	-147.66	-48.7	-12.4	71.9	69.7	2.19	32.788		
700.0	697.5	689.9	687.6	1.5	1.4	-159.65	-55.6	-0.5	95.1	92.6	2.54	37.459		
800.0	795.6	784.5	781.3	1.9	1.7	-167.23	-62.5	11.4	124.2	121.3	2.86	43.393		
900.0	893.3	878.3	874.1	2.3	2.0	-172.13	-69.4	23.1	156.9	153.7	3.19	49.240		
1,000.0	990.9	972.1	966.8	2.7	2.3	-175.37	-76.3	34.9	190.4	186.9	3.52	54.119		
1,100.0	1,088.6	1,065.8	1,059.6	3.1	2.6	-177.64	-83.1	46.6	224.2	220.4	3.85	58.191		
1,200.0	1,186.2	1,159.6	1,152.4	3.5	2.9	-179.32	-90.0	58.4	258.3	254.2	4.19	61.614		
1,300.0	1,283.8	1,253.4	1,245.2	3.9	3.1	179.39	-96.8	70.1	292.6	288.1	4.54	64.519		
1,400.0	1,381.5	1,347.1	1,338.0	4.3	3.4	178.37	-103.7	81.9	327.0	322.1	4.88	67.008		
1,500.0	1,479.1	1,440.9	1,430.7	4.7	3.7	177.55	-110.6	93.6	361.4	356.2	5.23	69.160		
1,600.0	1,576.8	1,534.7	1,523.5	5.1	4.0	176.87	-117.4	105.4	395.9	390.3	5.57	71.037		
1,700.0	1,674.4	1,628.5	1,616.3	5.5	4.3	176.30	-124.3	117.1	430.4	424.5	5.92	72.687		
1,800.0	1,772.0	1,722.2	1,709.1	6.0	4.6	175.81	-131.2	128.9	465.0	458.7	6.27	74.148		
1,900.0	1,869.7	1,816.0	1,801.8	6.4	4.9	175.39	-138.0	140.6	499.5	492.9	6.62	75.449		
2,000.0	1,967.3	1,909.8	1,894.6	6.8	5.2	175.02	-144.9	152.3	534.2	527.2	6.97	76.616		
2,100.0	2,065.0	2,003.5	1,987.4	7.2	5.4	174.70	-151.8	164.1	568.8	561.5	7.32	77.668		
2,200.0	2,162.6	2,097.3	2,080.2	7.6	5.7	174.42	-158.6	175.8	603.4	595.7	7.68	78.620		
2,300.0	2,260.2	2,191.1	2,172.9	8.0	6.0	174.16	-165.5	187.6	638.1	630.0	8.03	79.486		
2,400.0	2,357.9	2,284.9	2,265.7	8.5	6.3	173.94	-172.4	199.3	672.7	664.3	8.38	80.277		
2,500.0	2,455.5	2,378.6	2,358.5	8.9	6.6	173.73	-179.2	211.1	707.4	698.7	8.73	81.002		
2,600.0	2,553.2	2,472.4	2,451.3	9.3	6.9	173.55	-186.1	222.8	742.1	733.0	9.09	81.670		
2,700.0	2,650.8	2,566.2	2,544.1	9.7	7.2	173.38	-192.9	234.6	776.7	767.3	9.44	82.286		
2,800.0	2,748.4	2,659.9	2,636.8	10.1	7.5	173.22	-199.8	246.3	811.4	801.6	9.79	82.856		
2,900.0	2,846.1	2,753.7	2,729.6	10.5	7.8	173.08	-206.7	258.1	846.1	836.0	10.15	83.386		
3,000.0	2,943.7	2,847.5	2,822.4	11.0	8.0	172.95	-213.5	269.8	880.8	870.3	10.50	83.879		
3,100.0	3,041.4	2,941.2	2,915.2	11.4	8.3	172.83	-220.4	281.6	915.5	904.7	10.86	84.339		
3,200.0	3,139.0	3,035.0	3,007.9	11.8	8.6	172.71	-227.3	293.3	950.2	939.0	11.21	84.769		
3,300.0	3,236.6	3,128.8	3,100.7	12.2	8.9	172.61	-234.1	305.1	984.9	973.4	11.56	85.172		
3,400.0	3,334.3	3,222.6	3,193.5	12.6	9.2	172.51	-241.0	316.8	1,019.6	1,007.7	11.92	85.551		
3,500.0	3,431.9	3,316.3	3,286.3	13.0	9.5	172.42	-247.9	328.6	1,054.3	1,042.1	12.27	85.907		
3,600.0	3,529.6	3,410.1	3,379.1	13.5	9.8	172.34	-254.7	340.3	1,089.1	1,076.4	12.63	86.243		
3,700.0	3,627.2	3,503.9	3,471.8	13.9	10.1	172.26	-261.6	352.1	1,123.8	1,110.8	12.98	86.560		
3,800.0	3,724.8	3,597.6	3,564.6	14.3	10.4	172.18	-268.5	363.8	1,158.5	1,145.1	13.34	86.860		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-6D - 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 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	-134.36	-41.9	-42.8	59.9					
100.0	100.0	100.0	100.0	0.1	0.1	-134.36	-41.9	-42.8	59.9	59.6	0.30	201.931		
200.0	200.0	200.0	200.0	0.3	0.3	-134.36	-41.9	-42.8	59.9	59.3	0.65	92.779 CC, ES		
300.0	300.0	297.9	297.9	0.5	0.5	-101.09	-42.8	-44.2	61.9	60.9	0.99	62.220		
400.0	399.8	395.5	395.4	0.7	0.7	-104.32	-45.6	-48.4	68.0	66.7	1.36	50.008		
500.0	499.5	492.4	491.9	0.9	0.9	-108.53	-50.1	-55.3	78.6	76.9	1.76	44.798		
600.0	598.7	589.9	588.7	1.2	1.1	-112.93	-56.3	-64.5	93.5	91.3	2.19	42.718		
700.0	697.5	688.0	686.2	1.5	1.4	-117.58	-62.6	-74.1	110.8	108.1	2.66	41.570		
800.0	795.6	785.5	783.0	1.9	1.6	-122.16	-68.9	-83.6	130.4	127.2	3.17	41.103 SF		
900.0	893.3	882.6	879.4	2.3	1.9	-126.47	-75.2	-93.1	152.1	148.4	3.69	41.277		
1,000.0	990.9	979.6	975.7	2.7	2.2	-129.79	-81.5	-102.5	174.6	170.4	4.20	41.597		
1,100.0	1,088.6	1,076.6	1,072.1	3.1	2.4	-132.35	-87.8	-112.0	197.5	192.8	4.71	41.967		
1,200.0	1,186.2	1,173.6	1,168.4	3.5	2.7	-134.37	-94.1	-121.5	220.6	215.4	5.21	42.343		
1,300.0	1,283.8	1,270.6	1,264.8	3.9	2.9	-136.02	-100.3	-130.9	244.0	238.3	5.71	42.705		
1,400.0	1,381.5	1,367.6	1,361.1	4.3	3.2	-137.37	-106.6	-140.4	267.6	261.4	6.22	43.046		
1,500.0	1,479.1	1,464.6	1,457.4	4.7	3.5	-138.51	-112.9	-149.9	291.3	284.5	6.72	43.362		
1,600.0	1,576.8	1,561.6	1,553.8	5.1	3.7	-139.47	-119.2	-159.3	315.0	307.8	7.22	43.654		
1,700.0	1,674.4	1,658.6	1,650.1	5.5	4.0	-140.30	-125.5	-168.8	338.9	331.1	7.71	43.923		
1,800.0	1,772.0	1,755.6	1,746.5	6.0	4.2	-141.02	-131.8	-178.3	362.8	354.5	8.21	44.170		
1,900.0	1,869.7	1,852.6	1,842.8	6.4	4.5	-141.66	-138.0	-187.7	386.7	378.0	8.71	44.398		
2,000.0	1,967.3	1,949.6	1,939.1	6.8	4.8	-142.22	-144.3	-197.2	410.7	401.5	9.21	44.607		
2,100.0	2,065.0	2,046.7	2,035.5	7.2	5.0	-142.71	-150.6	-206.7	434.7	425.0	9.70	44.801		
2,200.0	2,162.6	2,143.7	2,131.8	7.6	5.3	-143.16	-156.9	-216.1	458.7	448.5	10.20	44.980		
2,300.0	2,260.2	2,240.7	2,228.2	8.0	5.5	-143.56	-163.2	-225.6	482.8	472.1	10.69	45.146		
2,400.0	2,357.9	2,337.7	2,324.5	8.5	5.8	-143.92	-169.5	-235.1	506.9	495.7	11.19	45.300		
2,500.0	2,455.5	2,434.7	2,420.9	8.9	6.1	-144.25	-175.7	-244.5	531.0	519.3	11.68	45.444		
2,600.0	2,553.2	2,531.7	2,517.2	9.3	6.3	-144.55	-182.0	-254.0	555.1	542.9	12.18	45.578		
2,700.0	2,650.8	2,628.7	2,613.5	9.7	6.6	-144.83	-188.3	-263.5	579.2	566.6	12.67	45.703		
2,800.0	2,748.4	2,725.7	2,709.9	10.1	6.8	-145.08	-194.6	-272.9	603.4	590.2	13.17	45.820		
2,900.0	2,846.1	2,822.7	2,806.2	10.5	7.1	-145.32	-200.9	-282.4	627.5	613.9	13.66	45.930		
3,000.0	2,943.7	2,919.7	2,902.6	11.0	7.4	-145.53	-207.2	-291.9	651.7	637.5	14.16	46.034		
3,100.0	3,041.4	3,016.7	2,998.9	11.4	7.6	-145.73	-213.4	-301.3	675.9	661.2	14.65	46.131		
3,200.0	3,139.0	3,113.8	3,095.2	11.8	7.9	-145.92	-219.7	-310.8	700.0	684.9	15.14	46.223		
3,300.0	3,236.6	3,210.8	3,191.6	12.2	8.1	-146.10	-226.0	-320.3	724.2	708.6	15.64	46.309		
3,400.0	3,334.3	3,307.8	3,287.9	12.6	8.4	-146.26	-232.3	-329.7	748.4	732.3	16.13	46.391		
3,500.0	3,431.9	3,404.8	3,384.3	13.0	8.7	-146.41	-238.6	-339.2	772.6	756.0	16.63	46.469		
3,600.0	3,529.6	3,501.8	3,480.6	13.5	8.9	-146.56	-244.9	-348.7	796.8	779.7	17.12	46.542		
3,700.0	3,627.2	3,598.8	3,576.9	13.9	9.2	-146.69	-251.1	-358.1	821.0	803.4	17.61	46.612		
3,800.0	3,724.8	3,695.8	3,673.3	14.3	9.4	-146.82	-257.4	-367.6	845.2	827.1	18.11	46.679		
3,900.0	3,822.5	3,792.8	3,769.6	14.7	9.7	-146.94	-263.7	-377.1	869.4	850.8	18.60	46.742		
4,000.0	3,920.1	3,889.8	3,866.0	15.1	10.0	-147.06	-270.0	-386.5	893.6	874.5	19.09	46.802		
4,100.0	4,017.8	3,986.8	3,962.3	15.5	10.2	-147.17	-276.3	-396.0	917.9	898.3	19.59	46.860		
4,200.0	4,115.4	4,083.8	4,058.6	16.0	10.5	-147.27	-282.6	-405.5	942.1	922.0	20.08	46.915		
4,300.0	4,213.0	4,180.8	4,155.0	16.4	10.8	-147.37	-288.8	-414.9	966.3	945.7	20.57	46.967		
4,400.0	4,310.7	4,277.9	4,251.3	16.8	11.0	-147.46	-295.1	-424.4	990.5	969.5	21.07	47.018		
4,500.0	4,408.3	4,374.9	4,347.7	17.2	11.3	-147.55	-301.4	-433.9	1,014.8	993.2	21.56	47.066		
4,600.0	4,505.9	4,471.9	4,444.0	17.6	11.5	-147.63	-307.7	-443.4	1,039.0	1,016.9	22.05	47.112		
4,700.0	4,603.6	4,568.9	4,540.4	18.0	11.8	-147.71	-314.0	-452.8	1,063.2	1,040.7	22.55	47.156		
4,800.0	4,701.2	4,665.9	4,636.7	18.5	12.1	-147.79	-320.3	-462.3	1,087.5	1,064.4	23.04	47.199		
4,900.0	4,798.9	4,762.9	4,733.0	18.9	12.3	-147.86	-326.5	-471.8	1,111.7	1,088.2	23.53	47.240		
5,000.0	4,896.5	4,859.9	4,829.4	19.3	12.6	-147.93	-332.8	-481.2	1,135.9	1,111.9	24.03	47.279		
5,100.0	4,994.1	4,956.9	4,925.7	19.7	12.8	-148.00	-339.1	-490.7	1,160.2	1,135.7	24.52	47.317		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design Chevron C-D29-596 - Chevron #29-8D - 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		
0.0	0.0	0.0	0.0	0.0	0.0	44.08	7.3	7.0	10.1					
100.0	100.0	100.0	100.0	0.1	0.1	44.08	7.3	7.0	10.1	9.8	0.30	34.136		
200.0	200.0	200.0	200.0	0.3	0.3	44.08	7.3	7.0	10.1	9.5	0.65	15.684 CC, ES		
300.0	300.0	299.6	299.6	0.5	0.5	85.16	8.8	8.0	11.6	10.6	1.00	11.578 SF		
400.0	399.8	399.0	398.9	0.7	0.7	97.37	13.2	10.7	16.4	15.0	1.37	11.962		
500.0	499.5	498.0	497.5	0.9	0.9	106.58	20.5	15.2	25.3	23.5	1.79	14.120		
600.0	598.7	596.3	595.1	1.2	1.2	112.03	30.6	21.4	38.1	35.9	2.27	16.824		
700.0	697.5	693.9	691.4	1.5	1.5	115.16	43.4	29.3	54.8	52.0	2.81	19.505		
800.0	795.6	790.8	786.6	1.9	1.8	117.10	58.9	38.8	75.1	71.7	3.42	21.964		
900.0	893.3	888.3	882.3	2.3	2.2	119.25	75.1	48.8	97.2	93.1	4.06	23.915		
1,000.0	990.9	985.8	977.9	2.7	2.5	120.71	91.3	58.7	119.4	114.7	4.72	25.300		
1,100.0	1,088.6	1,083.2	1,073.4	3.1	2.9	121.70	107.5	68.7	141.6	136.3	5.38	26.323		
1,200.0	1,186.2	1,180.7	1,169.0	3.5	3.3	122.43	123.6	78.7	163.9	157.9	6.05	27.106		
1,300.0	1,283.8	1,278.2	1,264.6	3.9	3.6	122.99	139.8	88.6	186.2	179.5	6.72	27.723		
1,400.0	1,381.5	1,375.6	1,360.2	4.3	4.0	123.42	156.0	98.6	208.5	201.1	7.39	28.220		
1,500.0	1,479.1	1,473.1	1,455.8	4.7	4.4	123.77	172.2	108.6	230.8	222.8	8.06	28.630		
1,600.0	1,576.8	1,570.6	1,551.4	5.1	4.7	124.06	188.4	118.6	253.2	244.4	8.74	28.973		
1,700.0	1,674.4	1,668.0	1,647.0	5.5	5.1	124.30	204.6	128.5	275.5	266.1	9.41	29.264		
1,800.0	1,772.0	1,765.5	1,742.6	6.0	5.5	124.51	220.8	138.5	297.8	287.7	10.09	29.514		
1,900.0	1,869.7	1,863.0	1,838.2	6.4	5.9	124.69	237.0	148.5	320.2	309.4	10.77	29.730		
2,000.0	1,967.3	1,960.4	1,933.8	6.8	6.2	124.84	253.2	158.4	342.5	331.1	11.45	29.920		
2,100.0	2,065.0	2,057.9	2,029.4	7.2	6.6	124.98	269.4	168.4	364.8	352.7	12.13	30.088		
2,200.0	2,162.6	2,155.4	2,125.0	7.6	7.0	125.10	285.6	178.4	387.2	374.4	12.81	30.237		
2,300.0	2,260.2	2,252.8	2,220.6	8.0	7.4	125.20	301.8	188.3	409.5	396.0	13.48	30.370		
2,400.0	2,357.9	2,350.3	2,316.2	8.5	7.7	125.30	318.0	198.3	431.9	417.7	14.16	30.490		
2,500.0	2,455.5	2,447.8	2,411.8	8.9	8.1	125.38	334.2	208.3	454.2	439.4	14.84	30.599		
2,600.0	2,553.2	2,545.3	2,507.4	9.3	8.5	125.46	350.4	218.3	476.6	461.0	15.52	30.698		
2,700.0	2,650.8	2,642.7	2,603.0	9.7	8.8	125.53	366.6	228.2	498.9	482.7	16.21	30.788		
2,800.0	2,748.4	2,740.2	2,698.6	10.1	9.2	125.60	382.8	238.2	521.3	504.4	16.89	30.870		
2,900.0	2,846.1	2,837.7	2,794.2	10.5	9.6	125.66	399.0	248.2	543.6	526.1	17.57	30.946		
3,000.0	2,943.7	2,935.1	2,889.8	11.0	10.0	125.71	415.2	258.1	566.0	547.7	18.25	31.016		
3,100.0	3,041.4	3,032.6	2,985.4	11.4	10.3	125.76	431.4	268.1	588.3	569.4	18.93	31.081		
3,200.0	3,139.0	3,130.1	3,080.9	11.8	10.7	125.81	447.6	278.1	610.7	591.1	19.61	31.141		
3,300.0	3,236.6	3,227.5	3,176.5	12.2	11.1	125.85	463.8	288.0	633.0	612.7	20.29	31.197		
3,400.0	3,334.3	3,325.0	3,272.1	12.6	11.5	125.89	480.0	298.0	655.4	634.4	20.97	31.250		
3,500.0	3,431.9	3,422.5	3,367.7	13.0	11.8	125.93	496.2	308.0	677.7	656.1	21.65	31.299		
3,600.0	3,529.6	3,519.9	3,463.3	13.5	12.2	125.97	512.4	318.0	700.1	677.7	22.33	31.345		
3,700.0	3,627.2	3,617.4	3,558.9	13.9	12.6	126.00	528.6	327.9	722.4	699.4	23.02	31.388		
3,800.0	3,724.8	3,714.9	3,654.5	14.3	13.0	126.03	544.8	337.9	744.8	721.1	23.70	31.428		
3,900.0	3,822.5	3,812.4	3,750.1	14.7	13.3	126.06	561.0	347.9	767.1	742.8	24.38	31.466		
4,000.0	3,920.1	3,909.8	3,845.7	15.1	13.7	126.09	577.2	357.8	789.5	764.4	25.06	31.502		
4,100.0	4,017.8	4,007.3	3,941.3	15.5	14.1	126.12	593.4	367.8	811.8	786.1	25.74	31.536		
4,200.0	4,115.4	4,104.8	4,036.9	16.0	14.5	126.14	609.6	377.8	834.2	807.8	26.42	31.569		
4,300.0	4,213.0	4,202.2	4,132.5	16.4	14.8	126.17	625.8	387.7	856.5	829.4	27.11	31.599		
4,400.0	4,310.7	4,299.7	4,228.1	16.8	15.2	126.19	642.0	397.7	878.9	851.1	27.79	31.629		
4,500.0	4,408.3	4,397.2	4,323.7	17.2	15.6	126.21	658.2	407.7	901.3	872.8	28.47	31.656		
4,600.0	4,505.9	4,494.6	4,419.3	17.6	16.0	126.23	674.4	417.7	923.6	894.5	29.15	31.683		
4,700.0	4,603.6	4,592.1	4,514.9	18.0	16.3	126.25	690.6	427.6	946.0	916.1	29.83	31.708		
4,800.0	4,701.2	4,689.6	4,610.5	18.5	16.7	126.27	706.8	437.6	968.3	937.8	30.52	31.732		
4,900.0	4,798.9	4,787.0	4,706.1	18.9	17.1	126.28	723.0	447.6	990.7	959.5	31.20	31.755		
5,000.0	4,896.5	4,884.5	4,801.7	19.3	17.4	126.30	739.2	457.5	1,013.0	981.1	31.88	31.776		
5,100.0	4,994.1	4,982.0	4,897.3	19.7	17.8	126.32	755.4	467.5	1,035.4	1,002.8	32.56	31.797		

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 #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Offset Design													Chevron C-D29-596 - Chevron #29-8D - 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)								
5,200.0	5,091.8	5,079.5	4,992.9	20.1	18.2	126.33	771.6	477.5	1,057.7	1,024.5	33.24	31.818						
5,300.0	5,189.4	5,176.9	5,088.4	20.6	18.6	126.35	787.7	487.4	1,080.1	1,046.2	33.93	31.837						
5,400.0	5,287.1	5,274.4	5,184.0	21.0	18.9	126.36	803.9	497.4	1,102.4	1,067.8	34.61	31.855						
5,500.0	5,384.7	5,371.9	5,279.6	21.4	19.3	126.38	820.1	507.4	1,124.8	1,089.5	35.29	31.873						
5,600.0	5,482.3	5,469.3	5,375.2	21.8	19.7	126.39	836.3	517.4	1,147.1	1,111.2	35.97	31.890						
5,700.0	5,580.0	5,566.8	5,470.8	22.2	20.1	126.40	852.5	527.3	1,169.5	1,132.8	36.65	31.907						

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron #29-16D
Project:	Garfield County	TVD Reference:	Well @ 7896.0ft
Reference Site:	Chevron C-D29-596	MD Reference:	Well @ 7896.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron #29-16D	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 #3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Well @ 7896.0ft

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Chevron #29-16D

Coordinate System is US State Plane 1983, Colorado Central Zone

Grid Convergence at Surface is: -1.70°

