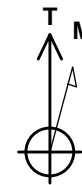
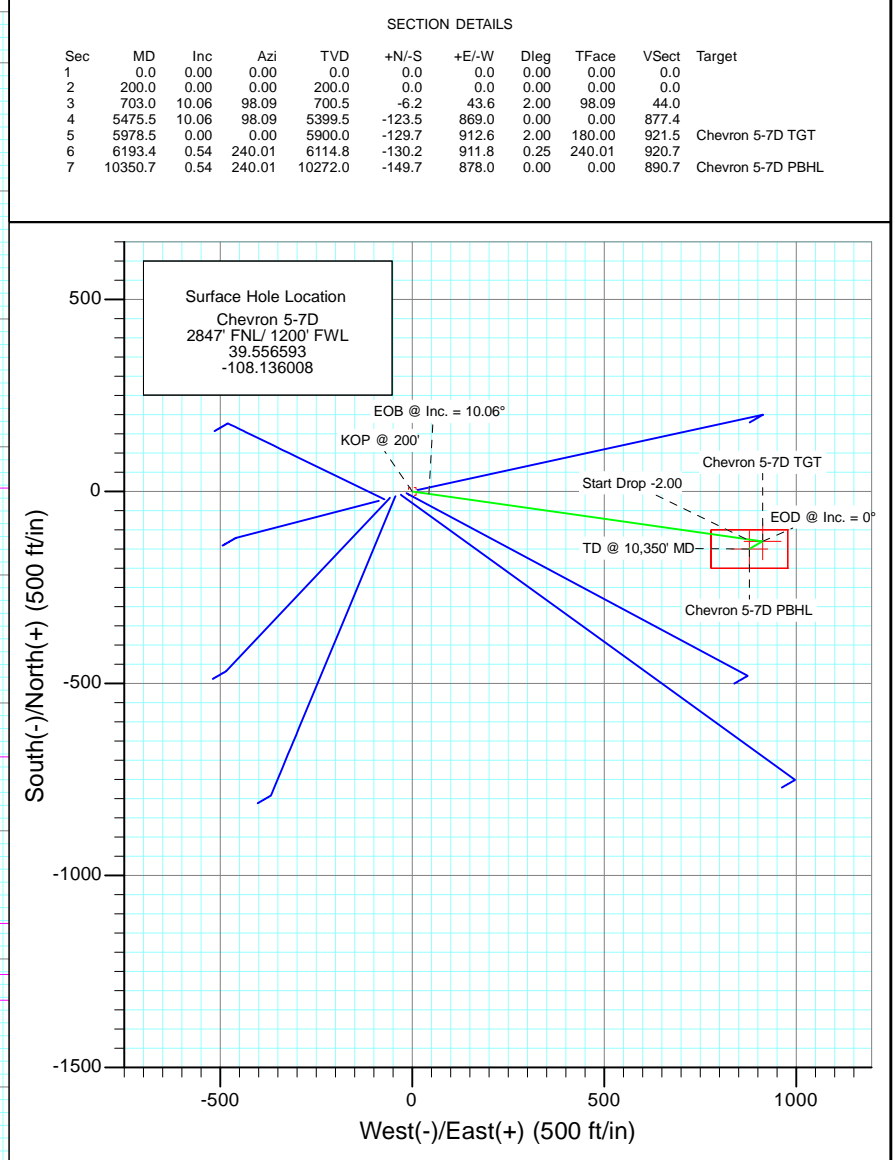
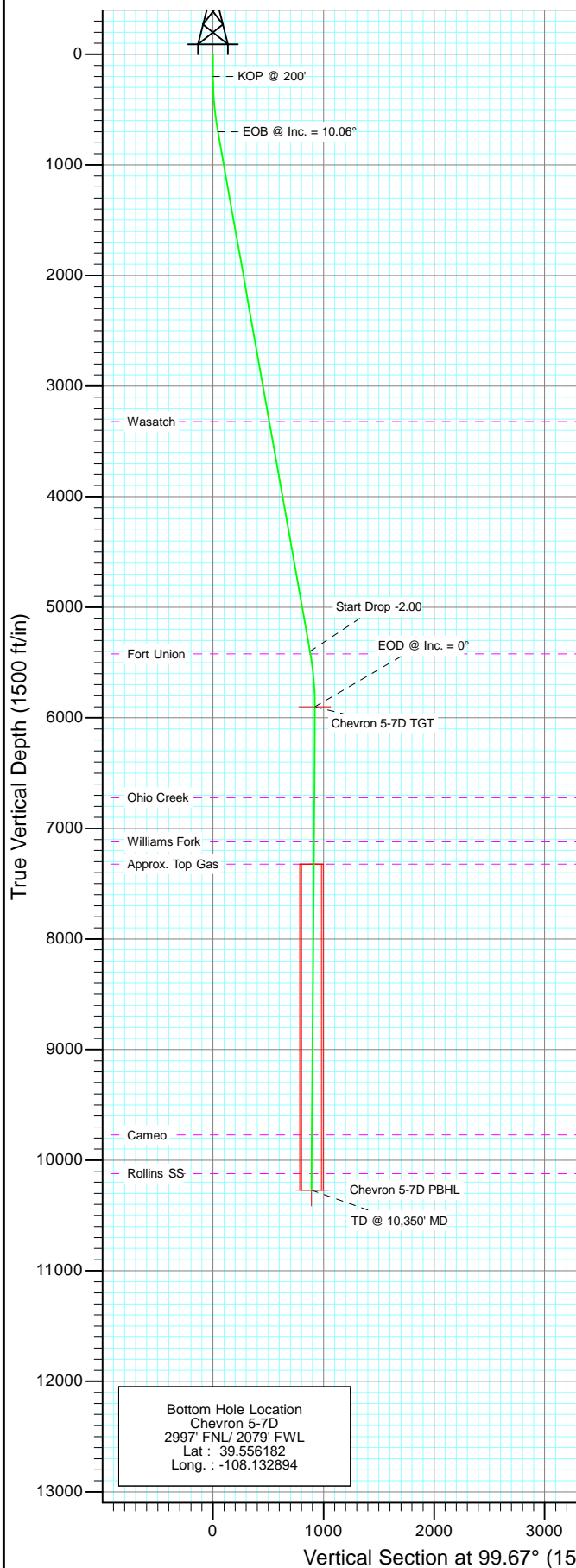




Project: Garfield County
Site: Chevron E05 696
Well: Chevron 5-7D
Wellbore: DD
Design: Plan #1



Azimuths to True North
Magnetic North: 10.48°

Magnetic Field
Strength: 52289.7snT
Dip Angle: 65.77°
Date: 1/13/2011
Model: IGRF2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3322.0	3365.5	Wasatch
5422.0	5498.3	Fort Union
6722.0	6800.6	Ohio Creek
7122.0	7200.6	Williams Fork
7322.0	7400.6	Approx. Top Gas
9772.0	9850.7	Cameo
10122.0	10200.7	Rollins SS

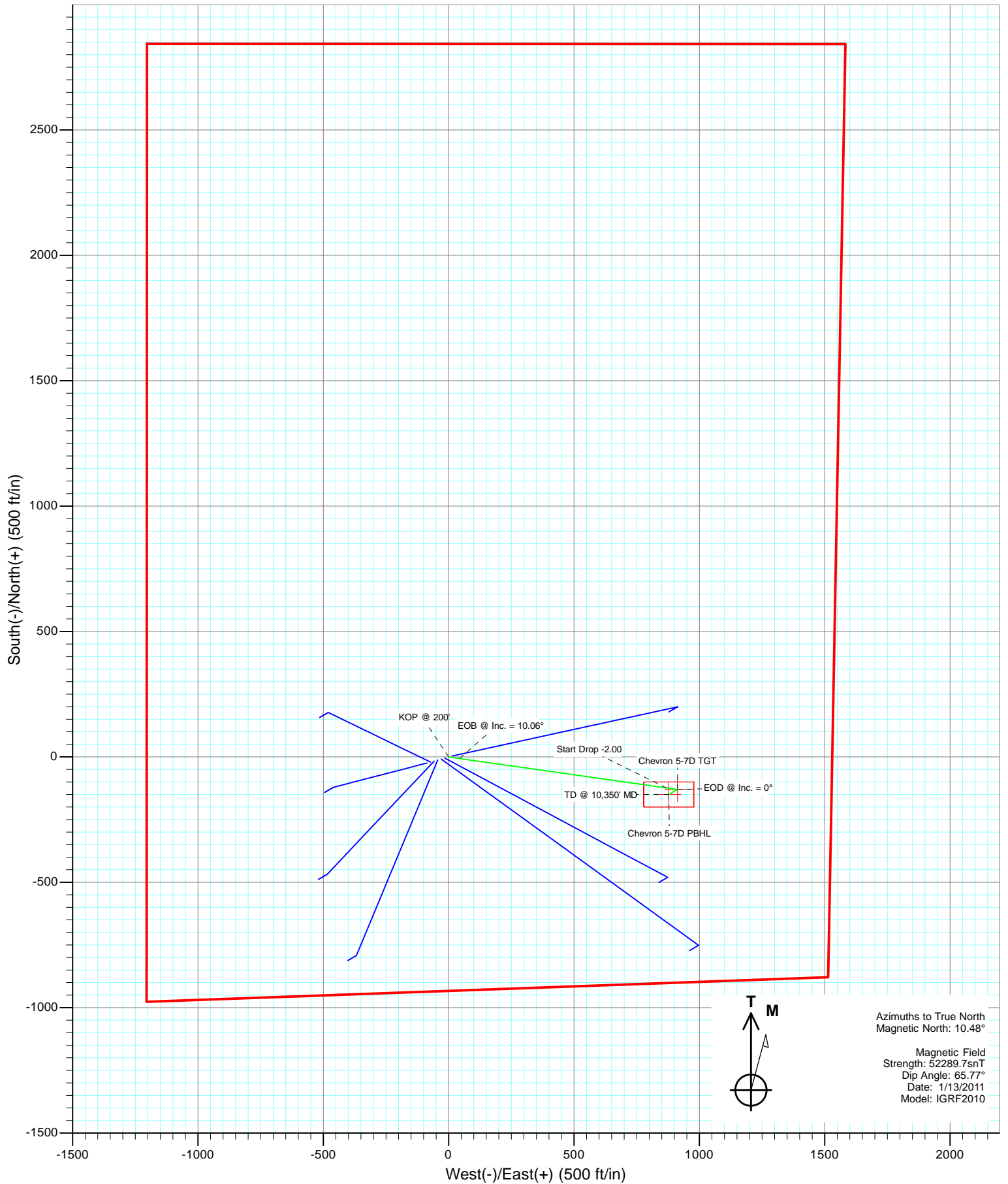
DESIGN DETAILS: Plan #1

WELL @ 8144.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From	TVD
No Target (Freehand)	99.67	Slot	0.0	0.0		0.0



Project: Garfield County
Site: Chevron E05 696
Well: Chevron 5-7D
Wellbore: DD
Design: Pad Layout



Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-7D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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

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

Well	Chevron 5-7D					
Well Position	+N/-S	0.0 ft	Northing:	1,638,402.94 ft	Latitude:	39.556593
	+E/-W	0.0 ft	Easting:	2,256,866.51 ft	Longitude:	-108.136008
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,124.0 ft

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

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	99.67

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	
703.0	10.06	98.09	700.5	-6.2	43.6	2.00	2.00	0.00	98.09	
5,475.5	10.06	98.09	5,399.5	-123.5	869.0	0.00	0.00	0.00	0.00	
5,978.5	0.00	0.00	5,900.0	-129.7	912.6	2.00	-2.00	0.00	180.00	Chevron 5-7D TGT
6,193.4	0.54	240.01	6,114.8	-130.2	911.8	0.25	0.25	-55.85	240.01	
10,350.7	0.54	240.01	10,272.0	-149.7	878.0	0.00	0.00	0.00	0.00	Chevron 5-7D PBHL

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-7D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	0.0	0.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	0.0	0.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
210.0	0.20	98.09	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	98.09	240.0	0.0	0.3	0.3	2.00	2.00	
270.0	1.40	98.09	270.0	-0.1	0.8	0.9	2.00	2.00	
300.0	2.00	98.09	300.0	-0.2	1.7	1.7	2.00	2.00	
330.0	2.60	98.09	330.0	-0.4	2.9	2.9	2.00	2.00	
360.0	3.20	98.09	359.9	-0.6	4.4	4.5	2.00	2.00	
390.0	3.80	98.09	389.9	-0.9	6.2	6.3	2.00	2.00	
420.0	4.40	98.09	419.8	-1.2	8.4	8.4	2.00	2.00	
450.0	5.00	98.09	449.7	-1.5	10.8	10.9	2.00	2.00	
480.0	5.60	98.09	479.6	-1.9	13.5	13.7	2.00	2.00	
510.0	6.20	98.09	509.4	-2.4	16.6	16.7	2.00	2.00	
540.0	6.80	98.09	539.2	-2.8	20.0	20.1	2.00	2.00	
570.0	7.40	98.09	569.0	-3.4	23.6	23.9	2.00	2.00	
600.0	8.00	98.09	598.7	-3.9	27.6	27.9	2.00	2.00	
630.0	8.60	98.09	628.4	-4.5	31.9	32.2	2.00	2.00	
660.0	9.20	98.09	658.0	-5.2	36.5	36.8	2.00	2.00	
690.0	9.80	98.09	687.6	-5.9	41.4	41.8	2.00	2.00	
703.0	10.06	98.09	700.5	-6.2	43.6	44.0	2.00	2.00	EOB @ Inc. = 10.06°
720.0	10.06	98.09	717.2	-6.6	46.5	47.0	0.00	0.00	
750.0	10.06	98.09	746.7	-7.4	51.7	52.2	0.00	0.00	
780.0	10.06	98.09	776.2	-8.1	56.9	57.5	0.00	0.00	
810.0	10.06	98.09	805.8	-8.8	62.1	62.7	0.00	0.00	
840.0	10.06	98.09	835.3	-9.6	67.3	68.0	0.00	0.00	
870.0	10.06	98.09	864.9	-10.3	72.5	73.2	0.00	0.00	
900.0	10.06	98.09	894.4	-11.0	77.7	78.4	0.00	0.00	
930.0	10.06	98.09	923.9	-11.8	82.9	83.7	0.00	0.00	
960.0	10.06	98.09	953.5	-12.5	88.1	88.9	0.00	0.00	
990.0	10.06	98.09	983.0	-13.3	93.2	94.1	0.00	0.00	
1,020.0	10.06	98.09	1,012.5	-14.0	98.4	99.4	0.00	0.00	
1,050.0	10.06	98.09	1,042.1	-14.7	103.6	104.6	0.00	0.00	
1,080.0	10.06	98.09	1,071.6	-15.5	108.8	109.9	0.00	0.00	
1,110.0	10.06	98.09	1,101.2	-16.2	114.0	115.1	0.00	0.00	
1,140.0	10.06	98.09	1,130.7	-16.9	119.2	120.3	0.00	0.00	
1,170.0	10.06	98.09	1,160.2	-17.7	124.4	125.6	0.00	0.00	
1,200.0	10.06	98.09	1,189.8	-18.4	129.6	130.8	0.00	0.00	
1,230.0	10.06	98.09	1,219.3	-19.2	134.8	136.1	0.00	0.00	
1,260.0	10.06	98.09	1,248.9	-19.9	139.9	141.3	0.00	0.00	
1,290.0	10.06	98.09	1,278.4	-20.6	145.1	146.5	0.00	0.00	
1,320.0	10.06	98.09	1,307.9	-21.4	150.3	151.8	0.00	0.00	
1,350.0	10.06	98.09	1,337.5	-22.1	155.5	157.0	0.00	0.00	
1,380.0	10.06	98.09	1,367.0	-22.8	160.7	162.2	0.00	0.00	
1,410.0	10.06	98.09	1,396.5	-23.6	165.9	167.5	0.00	0.00	
1,440.0	10.06	98.09	1,426.1	-24.3	171.1	172.7	0.00	0.00	
1,470.0	10.06	98.09	1,455.6	-25.0	176.3	178.0	0.00	0.00	

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-7D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
1,500.0	10.06	98.09	1,485.2	-25.8	181.5	183.2	0.00	0.00	
1,530.0	10.06	98.09	1,514.7	-26.5	186.6	188.4	0.00	0.00	
1,560.0	10.06	98.09	1,544.2	-27.3	191.8	193.7	0.00	0.00	
1,590.0	10.06	98.09	1,573.8	-28.0	197.0	198.9	0.00	0.00	
1,620.0	10.06	98.09	1,603.3	-28.7	202.2	204.2	0.00	0.00	
1,650.0	10.06	98.09	1,632.9	-29.5	207.4	209.4	0.00	0.00	
1,680.0	10.06	98.09	1,662.4	-30.2	212.6	214.6	0.00	0.00	
1,710.0	10.06	98.09	1,691.9	-30.9	217.8	219.9	0.00	0.00	
1,740.0	10.06	98.09	1,721.5	-31.7	223.0	225.1	0.00	0.00	
1,770.0	10.06	98.09	1,751.0	-32.4	228.1	230.4	0.00	0.00	
1,800.0	10.06	98.09	1,780.6	-33.2	233.3	235.6	0.00	0.00	
1,830.0	10.06	98.09	1,810.1	-33.9	238.5	240.8	0.00	0.00	
1,860.0	10.06	98.09	1,839.6	-34.6	243.7	246.1	0.00	0.00	
1,890.0	10.06	98.09	1,869.2	-35.4	248.9	251.3	0.00	0.00	
1,920.0	10.06	98.09	1,898.7	-36.1	254.1	256.5	0.00	0.00	
1,950.0	10.06	98.09	1,928.2	-36.8	259.3	261.8	0.00	0.00	
1,980.0	10.06	98.09	1,957.8	-37.6	264.5	267.0	0.00	0.00	
2,010.0	10.06	98.09	1,987.3	-38.3	269.7	272.3	0.00	0.00	
2,040.0	10.06	98.09	2,016.9	-39.1	274.8	277.5	0.00	0.00	
2,070.0	10.06	98.09	2,046.4	-39.8	280.0	282.7	0.00	0.00	
2,100.0	10.06	98.09	2,075.9	-40.5	285.2	288.0	0.00	0.00	
2,130.0	10.06	98.09	2,105.5	-41.3	290.4	293.2	0.00	0.00	
2,160.0	10.06	98.09	2,135.0	-42.0	295.6	298.5	0.00	0.00	
2,190.0	10.06	98.09	2,164.6	-42.7	300.8	303.7	0.00	0.00	
2,220.0	10.06	98.09	2,194.1	-43.5	306.0	308.9	0.00	0.00	
2,250.0	10.06	98.09	2,223.6	-44.2	311.2	314.2	0.00	0.00	
2,280.0	10.06	98.09	2,253.2	-45.0	316.4	319.4	0.00	0.00	
2,310.0	10.06	98.09	2,282.7	-45.7	321.5	324.7	0.00	0.00	
2,340.0	10.06	98.09	2,312.2	-46.4	326.7	329.9	0.00	0.00	
2,370.0	10.06	98.09	2,341.8	-47.2	331.9	335.1	0.00	0.00	
2,400.0	10.06	98.09	2,371.3	-47.9	337.1	340.4	0.00	0.00	
2,430.0	10.06	98.09	2,400.9	-48.6	342.3	345.6	0.00	0.00	
2,460.0	10.06	98.09	2,430.4	-49.4	347.5	350.8	0.00	0.00	
2,490.0	10.06	98.09	2,459.9	-50.1	352.7	356.1	0.00	0.00	

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Chevron 5-7D TGT	0.00	0.00	5,900.0	-129.7	912.6	1,638,246.81	2,257,775.01	39.556237	-108.132771
- plan misses target center by 3486.2ft at 2490.0ft MD (2459.9 TVD, -50.1 N, 352.7 E)									
- Point									
Chevron 5-7D PBHL	0.00	0.00	10,272.0	-149.7	878.0	1,638,227.85	2,257,739.82	39.556182	-108.132894
- plan misses target center by 7830.3ft at 2490.0ft MD (2459.9 TVD, -50.1 N, 352.7 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 5-7D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
2,500.0	10.06	98.09	2,469.8	-50.4	354.4	357.8	0.00	0.00	
2,600.0	10.06	98.09	2,568.2	-52.8	371.7	375.3	0.00	0.00	
2,700.0	10.06	98.09	2,666.7	-55.3	389.0	392.8	0.00	0.00	
2,800.0	10.06	98.09	2,765.2	-57.7	406.3	410.2	0.00	0.00	
2,900.0	10.06	98.09	2,863.6	-60.2	423.6	427.7	0.00	0.00	
3,000.0	10.06	98.09	2,962.1	-62.7	440.9	445.1	0.00	0.00	
3,100.0	10.06	98.09	3,060.6	-65.1	458.2	462.6	0.00	0.00	
3,200.0	10.06	98.09	3,159.0	-67.6	475.5	480.1	0.00	0.00	
3,300.0	10.06	98.09	3,257.5	-70.0	492.8	497.5	0.00	0.00	
3,365.5	10.06	98.09	3,322.0	-71.6	504.1	509.0	0.00	0.00	Wasatch
3,400.0	10.06	98.09	3,355.9	-72.5	510.1	515.0	0.00	0.00	
3,500.0	10.06	98.09	3,454.4	-74.9	527.4	532.5	0.00	0.00	
3,600.0	10.06	98.09	3,552.9	-77.4	544.7	549.9	0.00	0.00	
3,700.0	10.06	98.09	3,651.3	-79.9	562.0	567.4	0.00	0.00	
3,800.0	10.06	98.09	3,749.8	-82.3	579.2	584.8	0.00	0.00	
3,900.0	10.06	98.09	3,848.3	-84.8	596.5	602.3	0.00	0.00	
4,000.0	10.06	98.09	3,946.7	-87.2	613.8	619.8	0.00	0.00	
4,100.0	10.06	98.09	4,045.2	-89.7	631.1	637.2	0.00	0.00	
4,200.0	10.06	98.09	4,143.6	-92.2	648.4	654.7	0.00	0.00	
4,300.0	10.06	98.09	4,242.1	-94.6	665.7	672.2	0.00	0.00	
4,400.0	10.06	98.09	4,340.6	-97.1	683.0	689.6	0.00	0.00	
4,500.0	10.06	98.09	4,439.0	-99.5	700.3	707.1	0.00	0.00	
4,600.0	10.06	98.09	4,537.5	-102.0	717.6	724.5	0.00	0.00	
4,700.0	10.06	98.09	4,636.0	-104.4	734.9	742.0	0.00	0.00	
4,800.0	10.06	98.09	4,734.4	-106.9	752.2	759.5	0.00	0.00	
4,900.0	10.06	98.09	4,832.9	-109.4	769.5	776.9	0.00	0.00	
5,000.0	10.06	98.09	4,931.3	-111.8	786.8	794.4	0.00	0.00	
5,100.0	10.06	98.09	5,029.8	-114.3	804.1	811.9	0.00	0.00	
5,200.0	10.06	98.09	5,128.3	-116.7	821.4	829.3	0.00	0.00	
5,300.0	10.06	98.09	5,226.7	-119.2	838.7	846.8	0.00	0.00	
5,400.0	10.06	98.09	5,325.2	-121.6	856.0	864.2	0.00	0.00	
5,475.5	10.06	98.09	5,399.5	-123.5	869.0	877.4	0.00	0.00	Start Drop -2.00
5,498.3	9.60	98.09	5,422.0	-124.0	872.9	881.3	2.00	-2.00	Fort Union
5,500.0	9.57	98.09	5,423.7	-124.1	873.2	881.6	2.00	-2.00	
5,600.0	7.57	98.09	5,522.6	-126.2	887.9	896.5	2.00	-2.00	
5,700.0	5.57	98.09	5,621.9	-127.8	899.3	907.9	2.00	-2.00	
5,800.0	3.57	98.09	5,721.6	-128.9	907.1	915.9	2.00	-2.00	
5,900.0	1.57	98.09	5,821.5	-129.5	911.6	920.4	2.00	-2.00	
5,978.5	0.00	0.00	5,900.0	-129.7	912.6	921.5	2.00	-2.00	EOD @ Inc. = 0° - Chevron 5-7D TGT
6,000.0	0.05	240.01	5,921.5	-129.7	912.6	921.5	0.25	0.25	
6,100.0	0.30	240.01	6,021.5	-129.9	912.4	921.2	0.25	0.25	
6,193.4	0.54	240.01	6,114.8	-130.2	911.8	920.7	0.25	0.25	
6,200.0	0.54	240.01	6,121.4	-130.2	911.7	920.6	0.00	0.00	
6,300.0	0.54	240.01	6,221.4	-130.7	910.9	919.9	0.00	0.00	
6,400.0	0.54	240.01	6,321.4	-131.2	910.1	919.2	0.00	0.00	
6,500.0	0.54	240.01	6,421.4	-131.6	909.3	918.5	0.00	0.00	
6,600.0	0.54	240.01	6,521.4	-132.1	908.5	917.8	0.00	0.00	
6,700.0	0.54	240.01	6,621.4	-132.6	907.7	917.0	0.00	0.00	
6,800.0	0.54	240.01	6,721.4	-133.0	906.9	916.3	0.00	0.00	
6,800.6	0.54	240.01	6,722.0	-133.0	906.8	916.3	0.00	0.00	Ohio Creek
6,900.0	0.54	240.01	6,821.4	-133.5	906.0	915.6	0.00	0.00	
7,000.0	0.54	240.01	6,921.4	-134.0	905.2	914.9	0.00	0.00	

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Chevron 5-7D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
7,100.0	0.54	240.01	7,021.4	-134.5	904.4	914.1	0.00	0.00	
7,200.0	0.54	240.01	7,121.4	-134.9	903.6	913.4	0.00	0.00	
7,200.6	0.54	240.01	7,122.0	-134.9	903.6	913.4	0.00	0.00	Williams Fork
7,300.0	0.54	240.01	7,221.4	-135.4	902.8	912.7	0.00	0.00	
7,400.0	0.54	240.01	7,321.4	-135.9	902.0	912.0	0.00	0.00	
7,400.6	0.54	240.01	7,322.0	-135.9	902.0	912.0	0.00	0.00	Approx. Top Gas
7,500.0	0.54	240.01	7,421.4	-136.3	901.2	911.3	0.00	0.00	
7,600.0	0.54	240.01	7,521.4	-136.8	900.4	910.5	0.00	0.00	
7,700.0	0.54	240.01	7,621.4	-137.3	899.5	909.8	0.00	0.00	
7,800.0	0.54	240.01	7,721.4	-137.7	898.7	909.1	0.00	0.00	
7,900.0	0.54	240.01	7,821.4	-138.2	897.9	908.4	0.00	0.00	
8,000.0	0.54	240.01	7,921.4	-138.7	897.1	907.7	0.00	0.00	
8,100.0	0.54	240.01	8,021.4	-139.1	896.3	906.9	0.00	0.00	
8,200.0	0.54	240.01	8,121.4	-139.6	895.5	906.2	0.00	0.00	
8,300.0	0.54	240.01	8,221.4	-140.1	894.7	905.5	0.00	0.00	
8,400.0	0.54	240.01	8,321.4	-140.5	893.9	904.8	0.00	0.00	
8,500.0	0.54	240.01	8,421.3	-141.0	893.0	904.0	0.00	0.00	
8,600.0	0.54	240.01	8,521.3	-141.5	892.2	903.3	0.00	0.00	
8,700.0	0.54	240.01	8,621.3	-141.9	891.4	902.6	0.00	0.00	
8,800.0	0.54	240.01	8,721.3	-142.4	890.6	901.9	0.00	0.00	
8,900.0	0.54	240.01	8,821.3	-142.9	889.8	901.2	0.00	0.00	
9,000.0	0.54	240.01	8,921.3	-143.4	889.0	900.4	0.00	0.00	
9,100.0	0.54	240.01	9,021.3	-143.8	888.2	899.7	0.00	0.00	
9,200.0	0.54	240.01	9,121.3	-144.3	887.4	899.0	0.00	0.00	
9,300.0	0.54	240.01	9,221.3	-144.8	886.6	898.3	0.00	0.00	
9,400.0	0.54	240.01	9,321.3	-145.2	885.7	897.6	0.00	0.00	
9,500.0	0.54	240.01	9,421.3	-145.7	884.9	896.8	0.00	0.00	
9,600.0	0.54	240.01	9,521.3	-146.2	884.1	896.1	0.00	0.00	
9,700.0	0.54	240.01	9,621.3	-146.6	883.3	895.4	0.00	0.00	
9,800.0	0.54	240.01	9,721.3	-147.1	882.5	894.7	0.00	0.00	
9,850.7	0.54	240.01	9,772.0	-147.3	882.1	894.3	0.00	0.00	Cameo
9,900.0	0.54	240.01	9,821.3	-147.6	881.7	893.9	0.00	0.00	
10,000.0	0.54	240.01	9,921.3	-148.0	880.9	893.2	0.00	0.00	
10,100.0	0.54	240.01	10,021.3	-148.5	880.1	892.5	0.00	0.00	
10,200.0	0.54	240.01	10,121.3	-149.0	879.2	891.8	0.00	0.00	
10,200.7	0.54	240.01	10,122.0	-149.0	879.2	891.8	0.00	0.00	Rollins SS
10,300.0	0.54	240.01	10,221.3	-149.4	878.4	891.1	0.00	0.00	
10,350.7	0.54	240.01	10,272.0	-149.7	878.0	890.7	0.00	0.00	TD @ 10,350' MD - Chevron 5-7D PBHL

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Chevron 5-7D TGT	0.00	0.00	5,900.0	-129.7	912.6	1,638,246.81	2,257,775.01	39.556237	-108.132771
- plan hits target center									
- Point									
Chevron 5-7D PBHL	0.00	0.00	10,272.0	-149.7	878.0	1,638,227.85	2,257,739.82	39.556182	-108.132894
- 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 5-7D
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site:	Chevron E05 696	North Reference:	True
Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,365.5	3,322.0	Wasatch				
5,498.3	5,422.0	Fort Union				
6,800.6	6,722.0	Ohio Creek				
7,200.6	7,122.0	Williams Fork				
7,400.6	7,322.0	Approx. Top Gas				
9,850.7	9,772.0	Cameo				
10,200.7	10,122.0	Rollins SS				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200'	
703.0	700.5	-6.2	43.6	EOB @ Inc. = 10.06°	
5,475.5	5,399.5	-123.5	869.0	Start Drop -2.00	
5,978.5	5,900.0	-129.7	912.6	EOD @ Inc. = 0°	
10,350.7	10,272.0	-149.7	878.0	TD @ 10,350' MD	

Berry Petroleum Company (NAD 83)

**Garfield County
Chevron E05 696
Chevron 5-7D
DD
Plan #1**

Anticollision Report

14 January, 2011

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,235.1ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	1/14/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,350.7	Plan #1 (DD)	MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Chevron E05 696						
Chevron 5-17D - DD - Plan #1	200.0	200.0	45.2	44.5	71.863	CC, ES
Chevron 5-17D - DD - Plan #1	500.0	495.1	69.3	67.6	40.299	SF
Chevron 5-18D - DD - Plan #1	200.0	200.0	60.1	59.5	95.621	CC, ES
Chevron 5-18D - DD - Plan #1	500.0	492.2	87.6	85.9	51.829	SF
Chevron 5-19D - DD - Plan #1	200.0	200.0	90.2	89.6	143.569	CC, ES
Chevron 5-19D - DD - Plan #1	600.0	580.9	142.7	140.7	71.345	SF
Chevron 5-20D - DD - Plan #1	200.0	200.0	75.0	74.4	119.379	CC, ES
Chevron 5-20D - DD - Plan #1	500.0	491.2	102.1	100.4	60.702	SF
Chevron 5-5D - DD - Plan #1	320.1	322.1	25.2	24.0	21.710	CC, ES
Chevron 5-5D - DD - Plan #1	5,500.0	5,481.8	466.7	429.9	12.666	SF
Chevron 5-6D - DD - Plan #1	200.0	200.0	15.3	14.7	24.350	CC
Chevron 5-6D - DD - Plan #1	300.0	300.4	15.6	14.7	15.959	ES
Chevron 5-6D - DD - Plan #1	10,313.5	10,318.6	352.7	304.7	7.358	SF
Chevron 5-8D - DD - Plan #1	200.0	200.0	14.9	14.3	23.760	CC
Chevron 5-8D - DD - Plan #1	300.0	299.5	15.1	14.1	15.431	ES
Chevron 5-8D - DD - Plan #1	10,350.7	10,352.1	329.7	282.3	6.945	SF

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-17D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-105.92	-12.4	-43.4	45.2					
100.0	100.0	100.0	100.0	0.1	0.1	-105.92	-12.4	-43.4	45.2	44.9	0.28	161.693		
200.0	200.0	200.0	200.0	0.3	0.3	-105.92	-12.4	-43.4	45.2	44.5	0.63	71.863 CC, ES		
300.0	300.0	299.0	298.9	0.5	0.5	155.21	-14.0	-44.1	47.8	46.8	0.98	48.894		
400.0	399.8	397.5	397.3	0.7	0.7	153.30	-18.7	-46.0	55.9	54.5	1.34	41.721		
500.0	499.5	495.1	494.6	0.9	0.9	151.10	-26.4	-49.3	69.3	67.6	1.72	40.299 SF		
600.0	598.7	591.4	590.2	1.2	1.2	149.10	-37.0	-53.7	88.2	86.0	2.13	41.410		
700.0	697.5	686.1	683.7	1.5	1.5	147.47	-50.4	-59.2	112.3	109.7	2.57	43.648		
800.0	795.9	781.7	777.9	1.8	1.8	146.36	-65.8	-65.6	139.6	136.5	3.04	45.922		
900.0	894.4	877.9	872.6	2.2	2.1	145.61	-81.3	-72.1	166.9	163.4	3.52	47.472		
1,000.0	992.9	974.1	967.3	2.5	2.4	145.06	-96.9	-78.6	194.2	190.2	4.00	48.589		
1,100.0	1,091.3	1,070.2	1,062.0	2.9	2.7	144.65	-112.5	-85.0	221.6	217.1	4.48	49.426		
1,200.0	1,189.8	1,166.4	1,156.7	3.2	3.1	144.34	-128.0	-91.5	249.0	244.0	4.97	50.075		
1,300.0	1,288.2	1,262.6	1,251.3	3.6	3.4	144.08	-143.6	-98.0	276.4	270.9	5.46	50.591		
1,400.0	1,386.7	1,358.8	1,346.0	3.9	3.8	143.87	-159.1	-104.5	303.7	297.8	5.95	51.010		
1,500.0	1,485.2	1,454.9	1,440.7	4.3	4.1	143.69	-174.7	-110.9	331.1	324.7	6.45	51.356		
1,600.0	1,583.6	1,551.1	1,535.4	4.6	4.4	143.55	-190.2	-117.4	358.5	351.6	6.94	51.647		
1,700.0	1,682.1	1,647.3	1,630.1	5.0	4.8	143.42	-205.8	-123.9	385.9	378.5	7.44	51.895		
1,800.0	1,780.6	1,743.4	1,724.8	5.3	5.1	143.31	-221.4	-130.3	413.3	405.3	7.93	52.108		
1,900.0	1,879.0	1,839.6	1,819.5	5.7	5.4	143.21	-236.9	-136.8	440.7	432.2	8.43	52.293		
2,000.0	1,977.5	1,935.8	1,914.1	6.0	5.8	143.13	-252.5	-143.3	468.1	459.1	8.92	52.456		
2,100.0	2,075.9	2,032.0	2,008.8	6.4	6.1	143.05	-268.0	-149.8	495.5	486.0	9.42	52.599		
2,200.0	2,174.4	2,128.1	2,103.5	6.7	6.4	142.98	-283.6	-156.2	522.8	512.9	9.92	52.727		
2,300.0	2,272.9	2,224.3	2,198.2	7.1	6.8	142.92	-299.1	-162.7	550.2	539.8	10.41	52.842		
2,400.0	2,371.3	2,320.5	2,292.9	7.4	7.1	142.86	-314.7	-169.2	577.6	566.7	10.91	52.945		
2,500.0	2,469.8	2,416.7	2,387.6	7.8	7.5	142.81	-330.3	-175.6	605.0	593.6	11.41	53.038		
2,600.0	2,568.2	2,512.8	2,482.3	8.2	7.8	142.77	-345.8	-182.1	632.4	620.5	11.90	53.123		
2,700.0	2,666.7	2,609.0	2,576.9	8.5	8.1	142.73	-361.4	-188.6	659.8	647.4	12.40	53.200		
2,800.0	2,765.2	2,705.2	2,671.6	8.9	8.5	142.69	-376.9	-195.1	687.2	674.3	12.90	53.271		
2,900.0	2,863.6	2,801.3	2,766.3	9.2	8.8	142.65	-392.5	-201.5	714.6	701.2	13.40	53.337		
3,000.0	2,962.1	2,897.5	2,861.0	9.6	9.2	142.62	-408.0	-208.0	742.0	728.1	13.90	53.397		
3,100.0	3,060.6	2,993.7	2,955.7	9.9	9.5	142.59	-423.6	-214.5	769.4	755.0	14.39	53.453		
3,200.0	3,159.0	3,089.9	3,050.4	10.3	9.8	142.56	-439.2	-220.9	796.8	781.9	14.89	53.504		
3,300.0	3,257.5	3,186.0	3,145.1	10.6	10.2	142.53	-454.7	-227.4	824.2	808.8	15.39	53.553		
3,400.0	3,355.9	3,282.2	3,239.7	11.0	10.5	142.51	-470.3	-233.9	851.6	835.7	15.89	53.598		
3,500.0	3,454.4	3,378.4	3,334.4	11.3	10.8	142.48	-485.8	-240.4	879.0	862.6	16.39	53.640		
3,600.0	3,552.9	3,474.6	3,429.1	11.7	11.2	142.46	-501.4	-246.8	906.4	889.5	16.89	53.679		
3,700.0	3,651.3	3,570.7	3,523.8	12.1	11.5	142.44	-517.0	-253.3	933.8	916.4	17.38	53.716		
3,800.0	3,749.8	3,666.9	3,618.5	12.4	11.9	142.42	-532.5	-259.8	961.2	943.3	17.88	53.751		
3,900.0	3,848.3	3,763.1	3,713.2	12.8	12.2	142.40	-548.1	-266.3	988.6	970.2	18.38	53.784		
4,000.0	3,946.7	3,859.3	3,807.9	13.1	12.5	142.38	-563.6	-272.7	1,016.0	997.1	18.88	53.815		
4,100.0	4,045.2	3,955.4	3,902.5	13.5	12.9	142.37	-579.2	-279.2	1,043.4	1,024.0	19.38	53.844		
4,200.0	4,143.6	4,051.6	3,997.2	13.8	13.2	142.35	-594.7	-285.7	1,070.8	1,050.9	19.88	53.872		
4,300.0	4,242.1	4,147.8	4,091.9	14.2	13.6	142.34	-610.3	-292.1	1,098.2	1,077.8	20.38	53.898		
4,400.0	4,340.6	4,243.9	4,186.6	14.5	13.9	142.32	-625.9	-298.6	1,125.6	1,104.7	20.87	53.923		
4,500.0	4,439.0	4,340.1	4,281.3	14.9	14.2	142.31	-641.4	-305.1	1,153.0	1,131.6	21.37	53.947		
4,600.0	4,537.5	4,436.3	4,376.0	15.2	14.6	142.30	-657.0	-311.6	1,180.4	1,158.5	21.87	53.970		
4,700.0	4,636.0	4,532.5	4,470.7	15.6	14.9	142.28	-672.5	-318.0	1,207.8	1,185.4	22.37	53.991		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-18D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-105.83	-16.4	-57.8	60.1					
100.0	100.0	100.0	100.0	0.1	0.1	-105.83	-16.4	-57.8	60.1	59.8	0.28	215.147		
200.0	200.0	200.0	200.0	0.3	0.3	-105.83	-16.4	-57.8	60.1	59.5	0.63	95.621 CC, ES		
300.0	300.0	298.1	298.1	0.5	0.5	155.90	-17.6	-59.0	63.1	62.2	0.98	64.737		
400.0	399.8	395.7	395.6	0.7	0.7	155.46	-21.2	-62.4	72.3	71.0	1.33	54.474		
500.0	499.5	492.2	491.7	0.9	0.9	154.90	-27.2	-68.0	87.6	85.9	1.69	51.829 SF		
600.0	598.7	587.1	585.9	1.2	1.1	154.36	-35.4	-75.7	108.8	106.7	2.06	52.684		
700.0	697.5	679.9	677.7	1.5	1.4	153.85	-45.5	-85.3	135.8	133.3	2.46	55.279		
800.0	795.9	774.1	770.4	1.8	1.7	153.57	-57.5	-96.6	166.4	163.5	2.87	58.057		
900.0	894.4	869.3	864.2	2.2	2.1	153.36	-69.6	-108.0	197.1	193.8	3.28	60.020		
1,000.0	992.9	964.5	957.9	2.5	2.4	153.21	-81.7	-119.5	227.7	224.0	3.70	61.480		
1,100.0	1,091.3	1,059.7	1,051.6	2.9	2.7	153.10	-93.8	-130.9	258.4	254.3	4.13	62.602		
1,200.0	1,189.8	1,154.8	1,145.3	3.2	3.0	153.01	-105.9	-142.4	289.1	284.5	4.55	63.489		
1,300.0	1,288.2	1,250.0	1,239.0	3.6	3.4	152.93	-118.0	-153.8	319.8	314.8	4.98	64.207		
1,400.0	1,386.7	1,345.2	1,332.7	3.9	3.7	152.87	-130.1	-165.2	350.5	345.1	5.41	64.799		
1,500.0	1,485.2	1,440.4	1,426.4	4.3	4.0	152.82	-142.2	-176.7	381.1	375.3	5.84	65.295		
1,600.0	1,583.6	1,535.5	1,520.1	4.6	4.4	152.78	-154.4	-188.1	411.8	405.6	6.27	65.716		
1,700.0	1,682.1	1,630.7	1,613.8	5.0	4.7	152.74	-166.5	-199.6	442.5	435.8	6.70	66.078		
1,800.0	1,780.6	1,725.9	1,707.5	5.3	5.0	152.71	-178.6	-211.0	473.2	466.1	7.13	66.393		
1,900.0	1,879.0	1,821.1	1,801.2	5.7	5.4	152.68	-190.7	-222.4	503.9	496.3	7.56	66.668		
2,000.0	1,977.5	1,916.2	1,894.9	6.0	5.7	152.66	-202.8	-233.9	534.6	526.6	7.99	66.911		
2,100.0	2,075.9	2,011.4	1,988.6	6.4	6.1	152.63	-214.9	-245.3	565.3	556.8	8.42	67.127		
2,200.0	2,174.4	2,106.6	2,082.3	6.7	6.4	152.61	-227.0	-256.8	595.9	587.1	8.85	67.321		
2,300.0	2,272.9	2,201.8	2,176.0	7.1	6.7	152.60	-239.1	-268.2	626.6	617.3	9.28	67.495		
2,400.0	2,371.3	2,296.9	2,269.7	7.4	7.1	152.58	-251.3	-279.6	657.3	647.6	9.72	67.653		
2,500.0	2,469.8	2,392.1	2,363.4	7.8	7.4	152.56	-263.4	-291.1	688.0	677.8	10.15	67.796		
2,600.0	2,568.2	2,487.3	2,457.2	8.2	7.7	152.55	-275.5	-302.5	718.7	708.1	10.58	67.927		
2,700.0	2,666.7	2,582.5	2,550.9	8.5	8.1	152.54	-287.6	-314.0	749.4	738.3	11.01	68.047		
2,800.0	2,765.2	2,677.6	2,644.6	8.9	8.4	152.53	-299.7	-325.4	780.0	768.6	11.44	68.157		
2,900.0	2,863.6	2,772.8	2,738.3	9.2	8.7	152.52	-311.8	-336.8	810.7	798.9	11.88	68.258		
3,000.0	2,962.1	2,868.0	2,832.0	9.6	9.1	152.51	-323.9	-348.3	841.4	829.1	12.31	68.353		
3,100.0	3,060.6	2,963.2	2,925.7	9.9	9.4	152.50	-336.0	-359.7	872.1	859.4	12.74	68.440		
3,200.0	3,159.0	3,058.3	3,019.4	10.3	9.7	152.49	-348.2	-371.2	902.8	889.6	13.18	68.521		
3,300.0	3,257.5	3,153.5	3,113.1	10.6	10.1	152.48	-360.3	-382.6	933.5	919.9	13.61	68.597		
3,400.0	3,355.9	3,248.7	3,206.8	11.0	10.4	152.47	-372.4	-394.0	964.2	950.1	14.04	68.668		
3,500.0	3,454.4	3,343.9	3,300.5	11.3	10.8	152.47	-384.5	-405.5	994.8	980.4	14.47	68.734		
3,600.0	3,552.9	3,439.0	3,394.2	11.7	11.1	152.46	-396.6	-416.9	1,025.5	1,010.6	14.91	68.797		
3,700.0	3,651.3	3,534.2	3,487.9	12.1	11.4	152.45	-408.7	-428.4	1,056.2	1,040.9	15.34	68.856		
3,800.0	3,749.8	3,629.4	3,581.6	12.4	11.8	152.45	-420.8	-439.8	1,086.9	1,071.1	15.77	68.911		
3,900.0	3,848.3	3,724.6	3,675.3	12.8	12.1	152.44	-432.9	-451.2	1,117.6	1,101.4	16.21	68.963		
4,000.0	3,946.7	3,859.0	3,808.0	13.1	12.5	152.49	-448.5	-466.0	1,147.0	1,130.3	16.71	68.664		
4,100.0	4,045.2	4,009.6	3,957.7	13.5	12.9	152.71	-460.6	-477.4	1,172.2	1,155.0	17.20	68.140		
4,200.0	4,143.6	4,163.2	4,111.0	13.8	13.1	153.10	-467.1	-483.5	1,192.9	1,175.2	17.67	67.522		
4,300.0	4,242.1	4,292.2	4,240.0	14.2	13.2	153.56	-468.1	-484.5	1,209.3	1,191.3	18.07	66.925		
4,400.0	4,340.6	4,385.8	4,333.6	14.5	13.3	153.90	-468.3	-484.8	1,225.4	1,207.0	18.42	66.522		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-19D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						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	-105.70	-24.4	-86.8	90.2					
100.0	100.0	100.0	100.0	0.1	0.1	-105.70	-24.4	-86.8	90.2	89.9	0.28	323.030		
200.0	200.0	200.0	200.0	0.3	0.3	-105.70	-24.4	-86.8	90.2	89.6	0.63	143.569	CC, ES	
300.0	300.0	296.8	296.8	0.5	0.5	156.63	-24.8	-88.4	93.5	92.5	0.97	96.174		
400.0	399.8	393.0	392.9	0.7	0.7	157.70	-26.0	-93.1	103.4	102.1	1.32	78.538		
500.0	499.5	487.9	487.4	0.9	0.9	159.08	-28.0	-100.8	119.8	118.1	1.66	72.196		
600.0	598.7	580.9	579.8	1.2	1.1	160.45	-30.8	-111.3	142.7	140.7	2.00	71.345	SF	
700.0	697.5	671.5	669.4	1.5	1.4	161.64	-34.1	-124.3	172.0	169.7	2.34	73.544		
800.0	795.9	763.3	759.8	1.8	1.7	162.73	-38.1	-139.8	205.6	202.9	2.69	76.557		
900.0	894.4	857.3	852.3	2.2	2.0	163.54	-42.3	-155.9	239.4	236.4	3.04	78.875		
1,000.0	992.9	951.4	944.9	2.5	2.4	164.15	-46.5	-172.0	273.3	269.9	3.39	80.714		
1,100.0	1,091.3	1,045.5	1,037.5	2.9	2.7	164.62	-50.7	-188.1	307.2	303.4	3.74	82.205		
1,200.0	1,189.8	1,139.5	1,130.0	3.2	3.0	165.00	-54.8	-204.2	341.1	337.0	4.09	83.438		
1,300.0	1,288.2	1,233.6	1,222.6	3.6	3.3	165.31	-59.0	-220.3	375.0	370.5	4.44	84.474		
1,400.0	1,386.7	1,327.6	1,315.2	3.9	3.7	165.57	-63.2	-236.5	408.9	404.1	4.79	85.355		
1,500.0	1,485.2	1,421.7	1,407.8	4.3	4.0	165.79	-67.4	-252.6	442.8	437.7	5.14	86.114		
1,600.0	1,583.6	1,515.7	1,500.3	4.6	4.3	165.98	-71.5	-268.7	476.8	471.3	5.49	86.774		
1,700.0	1,682.1	1,609.8	1,592.9	5.0	4.7	166.15	-75.7	-284.8	510.7	504.8	5.85	87.353		
1,800.0	1,780.6	1,703.8	1,685.5	5.3	5.0	166.29	-79.9	-300.9	544.6	538.4	6.20	87.865		
1,900.0	1,879.0	1,797.9	1,778.0	5.7	5.4	166.41	-84.1	-317.0	578.6	572.0	6.55	88.321		
2,000.0	1,977.5	1,892.0	1,870.6	6.0	5.7	166.53	-88.2	-333.1	612.5	605.6	6.90	88.730		
2,100.0	2,075.9	1,986.0	1,963.2	6.4	6.0	166.63	-92.4	-349.2	646.5	639.2	7.26	89.099		
2,200.0	2,174.4	2,080.1	2,055.8	6.7	6.4	166.72	-96.6	-365.3	680.4	672.8	7.61	89.432		
2,300.0	2,272.9	2,174.1	2,148.3	7.1	6.7	166.80	-100.8	-381.4	714.4	706.4	7.96	89.736		
2,400.0	2,371.3	2,268.2	2,240.9	7.4	7.0	166.87	-105.0	-397.6	748.3	740.0	8.31	90.013		
2,500.0	2,469.8	2,362.2	2,333.5	7.8	7.4	166.94	-109.1	-413.7	782.3	773.6	8.67	90.268		
2,600.0	2,568.2	2,489.1	2,458.7	8.2	7.8	167.06	-114.2	-433.1	814.5	805.5	9.07	89.773		
2,700.0	2,666.7	2,623.3	2,592.1	8.5	8.1	167.24	-118.0	-447.8	842.5	833.0	9.49	88.782		
2,800.0	2,765.2	2,760.8	2,729.3	8.9	8.3	167.49	-120.3	-456.6	865.9	856.0	9.91	87.403		
2,900.0	2,863.6	2,894.8	2,863.2	9.2	8.5	167.79	-120.9	-459.1	884.8	874.5	10.32	85.768		
3,000.0	2,962.1	2,989.9	2,958.3	9.6	8.6	168.01	-121.0	-459.3	902.1	891.4	10.66	84.620		
3,100.0	3,060.6	3,087.6	3,056.0	9.9	8.7	168.22	-121.3	-459.8	919.7	908.7	11.01	83.537		
3,200.0	3,159.0	3,186.0	3,154.4	10.3	8.8	168.43	-121.6	-460.2	937.3	925.9	11.36	82.518		
3,300.0	3,257.5	3,284.4	3,252.8	10.6	8.9	168.62	-121.8	-460.7	954.9	943.2	11.71	81.564		
3,400.0	3,355.9	3,382.8	3,351.2	11.0	9.0	168.81	-122.1	-461.2	972.5	960.5	12.06	80.668		
3,500.0	3,454.4	3,481.2	3,449.6	11.3	9.1	168.99	-122.4	-461.6	990.2	977.8	12.40	79.826		
3,600.0	3,552.9	3,579.6	3,547.9	11.7	9.3	169.17	-122.7	-462.1	1,007.8	995.1	12.75	79.032		
3,700.0	3,651.3	3,677.9	3,646.3	12.1	9.4	169.34	-122.9	-462.6	1,025.5	1,012.4	13.10	78.283		
3,800.0	3,749.8	3,776.3	3,744.7	12.4	9.5	169.50	-123.2	-463.1	1,043.1	1,029.7	13.45	77.575		
3,900.0	3,848.3	3,874.7	3,843.1	12.8	9.6	169.66	-123.5	-463.5	1,060.8	1,047.0	13.79	76.905		
4,000.0	3,946.7	3,973.1	3,941.5	13.1	9.8	169.81	-123.7	-464.0	1,078.5	1,064.3	14.14	76.269		
4,100.0	4,045.2	4,071.5	4,039.9	13.5	9.9	169.96	-124.0	-464.5	1,096.1	1,081.7	14.49	75.666		
4,200.0	4,143.6	4,169.9	4,138.3	13.8	10.0	170.10	-124.3	-464.9	1,113.8	1,099.0	14.83	75.092		
4,300.0	4,242.1	4,268.3	4,236.6	14.2	10.2	170.24	-124.6	-465.4	1,131.5	1,116.4	15.18	74.545		
4,400.0	4,340.6	4,366.6	4,335.0	14.5	10.3	170.37	-124.8	-465.9	1,149.2	1,133.7	15.53	74.024		
4,500.0	4,439.0	4,465.0	4,433.4	14.9	10.4	170.50	-125.1	-466.3	1,166.9	1,151.1	15.87	73.527		
4,600.0	4,537.5	4,563.4	4,531.8	15.2	10.6	170.63	-125.4	-466.8	1,184.7	1,168.4	16.22	73.052		
4,700.0	4,636.0	4,661.8	4,630.2	15.6	10.7	170.75	-125.6	-467.3	1,202.4	1,185.8	16.56	72.598		
4,800.0	4,734.4	4,760.2	4,728.6	16.0	10.8	170.87	-125.9	-467.7	1,220.1	1,203.2	16.91	72.163		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-20D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						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	-105.78	-20.4	-72.2	75.0					
100.0	100.0	100.0	100.0	0.1	0.1	-105.78	-20.4	-72.2	75.0	74.7	0.28	268.603		
200.0	200.0	200.0	200.0	0.3	0.3	-105.78	-20.4	-72.2	75.0	74.4	0.63	119.379 CC, ES		
300.0	300.0	298.0	297.9	0.5	0.5	157.44	-19.7	-73.7	77.9	76.9	0.98	79.849		
400.0	399.8	395.3	395.1	0.7	0.7	160.81	-17.5	-78.2	86.8	85.5	1.33	65.367		
500.0	499.5	491.2	490.7	0.9	0.9	165.07	-13.9	-85.5	102.1	100.4	1.68	60.702 SF		
600.0	598.7	585.2	584.0	1.2	1.1	169.22	-9.1	-95.4	124.0	122.0	2.03	61.073		
700.0	697.5	676.6	674.5	1.5	1.4	172.75	-3.1	-107.8	152.6	150.3	2.37	64.387		
800.0	795.9	768.5	764.9	1.8	1.7	175.64	3.9	-122.4	185.8	183.1	2.71	68.509		
900.0	894.4	862.4	857.2	2.2	2.1	177.74	11.3	-137.5	219.6	216.5	3.06	71.862		
1,000.0	992.9	956.3	949.6	2.5	2.4	179.28	18.7	-152.7	253.5	250.1	3.40	74.614		
1,100.0	1,091.3	1,050.1	1,041.9	2.9	2.7	-179.54	26.0	-167.9	287.6	283.8	3.74	76.899		
1,200.0	1,189.8	1,144.0	1,134.3	3.2	3.0	-178.62	33.4	-183.1	321.7	317.7	4.08	78.820		
1,300.0	1,288.2	1,237.9	1,226.6	3.6	3.4	-177.86	40.8	-198.3	356.0	351.5	4.42	80.454		
1,400.0	1,386.7	1,331.8	1,318.9	3.9	3.7	-177.25	48.1	-213.4	390.2	385.4	4.77	81.858		
1,500.0	1,485.2	1,425.6	1,411.3	4.3	4.0	-176.73	55.5	-228.6	424.5	419.4	5.11	83.077		
1,600.0	1,583.6	1,519.5	1,503.6	4.6	4.4	-176.29	62.8	-243.8	458.8	453.4	5.45	84.144		
1,700.0	1,682.1	1,613.4	1,596.0	5.0	4.7	-175.91	70.2	-259.0	493.2	487.4	5.80	85.085		
1,800.0	1,780.6	1,707.2	1,688.3	5.3	5.1	-175.57	77.6	-274.1	527.5	521.4	6.14	85.922		
1,900.0	1,879.0	1,801.1	1,780.7	5.7	5.4	-175.28	84.9	-289.3	561.9	555.4	6.48	86.669		
2,000.0	1,977.5	1,895.0	1,873.0	6.0	5.7	-175.03	92.3	-304.5	596.3	589.5	6.83	87.341		
2,100.0	2,075.9	1,988.9	1,965.3	6.4	6.1	-174.80	99.7	-319.7	630.7	623.5	7.17	87.947		
2,200.0	2,174.4	2,082.7	2,057.7	6.7	6.4	-174.59	107.0	-334.8	665.1	657.6	7.52	88.498		
2,300.0	2,272.9	2,176.6	2,150.0	7.1	6.8	-174.41	114.4	-350.0	699.5	691.6	7.86	89.001		
2,400.0	2,371.3	2,270.5	2,242.4	7.4	7.1	-174.24	121.7	-365.2	733.9	725.7	8.20	89.461		
2,500.0	2,469.8	2,364.3	2,334.7	7.8	7.4	-174.09	129.1	-380.4	768.3	759.8	8.55	89.883		
2,600.0	2,568.2	2,458.2	2,427.1	8.2	7.8	-173.95	136.5	-395.5	802.8	793.9	8.89	90.273		
2,700.0	2,666.7	2,552.1	2,519.4	8.5	8.1	-173.82	143.8	-410.7	837.2	828.0	9.24	90.633		
2,800.0	2,765.2	2,645.9	2,611.7	8.9	8.4	-173.70	151.2	-425.9	871.6	862.0	9.58	90.967		
2,900.0	2,863.6	2,748.4	2,712.6	9.2	8.8	-173.59	159.2	-442.4	906.0	896.0	9.94	91.135		
3,000.0	2,962.1	2,887.1	2,849.8	9.6	9.2	-173.50	168.0	-460.6	937.3	926.9	10.36	90.471		
3,100.0	3,060.6	3,030.0	2,991.9	9.9	9.5	-173.50	174.1	-473.1	964.0	953.2	10.78	89.403		
3,200.0	3,159.0	3,176.4	3,138.2	10.3	9.7	-173.59	177.1	-479.3	985.9	974.7	11.21	87.965		
3,300.0	3,257.5	3,294.0	3,255.7	10.6	9.8	-173.72	177.4	-480.0	1,003.7	992.1	11.58	86.655		
3,400.0	3,355.9	3,390.0	3,351.7	11.0	9.9	-173.84	177.2	-480.4	1,021.4	1,009.5	11.92	85.680		
3,500.0	3,454.4	3,488.3	3,450.1	11.3	10.0	-173.97	176.9	-480.8	1,039.2	1,026.9	12.26	84.739		
3,600.0	3,552.9	3,586.7	3,548.5	11.7	10.2	-174.09	176.6	-481.3	1,057.0	1,044.4	12.61	83.850		
3,700.0	3,651.3	3,685.1	3,646.9	12.1	10.3	-174.21	176.3	-481.8	1,074.8	1,061.8	12.95	83.009		
3,800.0	3,749.8	3,783.5	3,745.2	12.4	10.4	-174.32	176.0	-482.3	1,092.6	1,079.3	13.29	82.212		
3,900.0	3,848.3	3,881.9	3,843.6	12.8	10.5	-174.43	175.7	-482.8	1,110.4	1,096.7	13.63	81.455		
4,000.0	3,946.7	3,980.2	3,942.0	13.1	10.6	-174.54	175.5	-483.3	1,128.2	1,114.2	13.97	80.735		
4,100.0	4,045.2	4,078.6	4,040.4	13.5	10.7	-174.64	175.2	-483.8	1,146.0	1,131.7	14.32	80.050		
4,200.0	4,143.6	4,177.0	4,138.8	13.8	10.8	-174.74	174.9	-484.3	1,163.8	1,149.1	14.66	79.398		
4,300.0	4,242.1	4,275.4	4,237.1	14.2	11.0	-174.84	174.6	-484.8	1,181.6	1,166.6	15.00	78.775		
4,400.0	4,340.6	4,373.8	4,335.5	14.5	11.1	-174.93	174.3	-485.3	1,199.4	1,184.1	15.34	78.180		
4,500.0	4,439.0	4,472.1	4,433.9	14.9	11.2	-175.02	174.0	-485.8	1,217.2	1,201.5	15.68	77.611		
4,600.0	4,537.5	4,570.5	4,532.3	15.2	11.3	-175.11	173.7	-486.3	1,235.0	1,219.0	16.03	77.067		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-5D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-106.09	-8.4	-29.0	30.2					
100.0	100.0	100.0	100.0	0.1	0.1	-106.09	-8.4	-29.0	30.2	29.9	0.28	108.238		
200.0	200.0	200.0	200.0	0.3	0.3	-106.09	-8.4	-29.0	30.2	29.6	0.63	48.106		
300.0	300.0	302.3	301.1	0.5	0.6	132.04	-16.5	-17.8	25.4	24.4	1.06	24.097		
320.1	320.0	322.1	320.7	0.5	0.6	125.27	-18.7	-14.8	25.2	24.0	1.16	21.710 CC, ES		
400.0	399.8	401.3	398.5	0.7	0.9	102.46	-27.2	-3.0	28.1	26.5	1.57	17.865		
500.0	499.5	500.6	496.1	0.9	1.2	87.44	-37.9	11.7	36.0	34.0	2.07	17.386		
600.0	598.7	600.2	594.0	1.2	1.6	82.50	-48.6	26.5	44.9	42.3	2.62	17.173		
700.0	697.5	699.8	691.9	1.5	2.0	82.84	-59.3	41.4	53.5	50.3	3.25	16.468		
800.0	795.9	799.4	789.8	1.8	2.3	84.92	-70.0	56.2	61.9	58.0	3.92	15.773		
900.0	894.4	899.0	887.8	2.2	2.7	86.50	-80.8	71.0	70.4	65.7	4.61	15.262		
1,000.0	992.9	998.7	985.7	2.5	3.1	87.74	-91.5	85.8	78.8	73.5	5.30	14.876		
1,100.0	1,091.3	1,098.3	1,083.6	2.9	3.4	88.74	-102.2	100.6	87.4	81.4	5.99	14.575		
1,200.0	1,189.8	1,197.9	1,181.6	3.2	3.8	89.56	-112.9	115.4	95.9	89.2	6.69	14.335		
1,300.0	1,288.2	1,297.6	1,279.5	3.6	4.2	90.25	-123.6	130.2	104.5	97.1	7.39	14.140		
1,400.0	1,386.7	1,397.2	1,377.4	3.9	4.5	90.83	-134.4	145.0	113.0	105.0	8.09	13.978		
1,500.0	1,485.2	1,496.8	1,475.4	4.3	4.9	91.33	-145.1	159.9	121.6	112.8	8.79	13.842		
1,600.0	1,583.6	1,596.4	1,573.3	4.6	5.3	91.76	-155.8	174.7	130.2	120.7	9.49	13.727		
1,700.0	1,682.1	1,696.1	1,671.2	5.0	5.6	92.15	-166.5	189.5	138.8	128.6	10.19	13.627		
1,800.0	1,780.6	1,795.7	1,769.2	5.3	6.0	92.48	-177.2	204.3	147.4	136.5	10.89	13.540		
1,900.0	1,879.0	1,895.3	1,867.1	5.7	6.4	92.78	-188.0	219.1	156.0	144.4	11.59	13.464		
2,000.0	1,977.5	1,994.9	1,965.0	6.0	6.7	93.05	-198.7	233.9	164.6	152.3	12.29	13.397		
2,100.0	2,075.9	2,094.6	2,063.0	6.4	7.1	93.29	-209.4	248.7	173.2	160.2	12.99	13.337		
2,200.0	2,174.4	2,194.2	2,160.9	6.7	7.4	93.51	-220.1	263.6	181.9	168.2	13.69	13.283		
2,300.0	2,272.9	2,293.8	2,258.8	7.1	7.8	93.71	-230.8	278.4	190.5	176.1	14.39	13.234		
2,400.0	2,371.3	2,393.4	2,356.8	7.4	8.2	93.89	-241.5	293.2	199.1	184.0	15.09	13.190		
2,500.0	2,469.8	2,493.1	2,454.7	7.8	8.5	94.06	-252.3	308.0	207.7	191.9	15.80	13.150		
2,600.0	2,568.2	2,592.7	2,552.6	8.2	8.9	94.21	-263.0	322.8	216.3	199.8	16.50	13.114		
2,700.0	2,666.7	2,692.3	2,650.6	8.5	9.3	94.35	-273.7	337.6	225.0	207.8	17.20	13.081		
2,800.0	2,765.2	2,791.9	2,748.5	8.9	9.6	94.48	-284.4	352.4	233.6	215.7	17.90	13.050		
2,900.0	2,863.6	2,891.6	2,846.4	9.2	10.0	94.60	-295.1	367.2	242.2	223.6	18.60	13.021		
3,000.0	2,962.1	2,991.2	2,944.4	9.6	10.4	94.72	-305.9	382.1	250.8	231.5	19.30	12.995		
3,100.0	3,060.6	3,090.8	3,042.3	9.9	10.7	94.82	-316.6	396.9	259.5	239.5	20.01	12.971		
3,200.0	3,159.0	3,190.4	3,140.2	10.3	11.1	94.92	-327.3	411.7	268.1	247.4	20.71	12.948		
3,300.0	3,257.5	3,290.1	3,238.2	10.6	11.5	95.01	-338.0	426.5	276.7	255.3	21.41	12.927		
3,400.0	3,355.9	3,389.7	3,336.1	11.0	11.8	95.10	-348.7	441.3	285.4	263.3	22.11	12.907		
3,500.0	3,454.4	3,489.3	3,434.0	11.3	12.2	95.18	-359.5	456.1	294.0	271.2	22.81	12.888		
3,600.0	3,552.9	3,588.9	3,532.0	11.7	12.6	95.26	-370.2	470.9	302.6	279.1	23.51	12.871		
3,700.0	3,651.3	3,688.6	3,629.9	12.1	12.9	95.33	-380.9	485.8	311.3	287.1	24.22	12.854		
3,800.0	3,749.8	3,788.2	3,727.8	12.4	13.3	95.40	-391.6	500.6	319.9	295.0	24.92	12.838		
3,900.0	3,848.3	3,887.8	3,825.8	12.8	13.7	95.47	-402.3	515.4	328.5	302.9	25.62	12.824		
4,000.0	3,946.7	3,987.4	3,923.7	13.1	14.0	95.53	-413.1	530.2	337.2	310.9	26.32	12.810		
4,100.0	4,045.2	4,087.1	4,021.6	13.5	14.4	95.59	-423.8	545.0	345.8	318.8	27.02	12.797		
4,200.0	4,143.6	4,186.7	4,119.6	13.8	14.8	95.65	-434.5	559.8	354.4	326.7	27.73	12.784		
4,300.0	4,242.1	4,286.3	4,217.5	14.2	15.1	95.70	-445.2	574.6	363.1	334.7	28.43	12.772		
4,400.0	4,340.6	4,386.0	4,315.4	14.5	15.5	95.75	-455.9	589.4	371.7	342.6	29.13	12.761		
4,500.0	4,439.0	4,485.6	4,413.4	14.9	15.9	95.80	-466.7	604.3	380.4	350.5	29.83	12.750		
4,600.0	4,537.5	4,585.2	4,511.3	15.2	16.2	95.85	-477.4	619.1	389.0	358.5	30.53	12.740		
4,700.0	4,636.0	4,684.8	4,609.2	15.6	16.6	95.89	-488.1	633.9	397.6	366.4	31.23	12.731		
4,800.0	4,734.4	4,784.5	4,707.2	16.0	17.0	95.93	-498.8	648.7	406.3	374.3	31.94	12.721		
4,900.0	4,832.9	4,884.1	4,805.1	16.3	17.3	95.97	-509.5	663.5	414.9	382.3	32.64	12.712		
5,000.0	4,931.3	4,983.7	4,903.0	16.7	17.7	96.01	-520.3	678.3	423.5	390.2	33.34	12.704		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-5D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,029.8	5,083.3	5,001.0	17.0	18.1	96.05	-531.0	693.1	432.2	398.1	34.04	12.696	12.666 SF	
5,200.0	5,128.3	5,183.0	5,098.9	17.4	18.4	96.09	-541.7	708.0	440.8	406.1	34.74	12.688		
5,300.0	5,226.7	5,282.6	5,196.8	17.7	18.8	96.12	-552.4	722.8	449.5	414.0	35.45	12.680		
5,400.0	5,325.2	5,382.2	5,294.8	18.1	19.2	96.16	-563.1	737.6	458.1	421.9	36.15	12.673		
5,500.0	5,423.7	5,481.8	5,392.7	18.4	19.5	96.22	-573.9	752.4	466.7	429.9	36.85	12.666 SF		
5,600.0	5,522.6	5,581.5	5,490.6	18.7	19.9	96.10	-584.6	767.2	475.1	437.6	37.48	12.676		
5,700.0	5,621.9	5,681.0	5,588.5	19.0	20.3	95.58	-595.3	782.0	483.1	445.1	38.03	12.705		
5,800.0	5,721.6	5,780.2	5,686.0	19.2	20.6	94.67	-606.0	796.8	490.9	452.4	38.48	12.757		
5,900.0	5,821.5	5,879.2	5,783.3	19.3	21.0	93.40	-616.6	811.5	498.7	459.9	38.84	12.840		
6,000.0	5,921.5	5,977.6	5,880.1	19.4	21.4	-50.14	-627.2	826.1	506.7	467.6	39.10	12.959		
6,100.0	6,021.5	6,075.9	5,976.7	19.5	21.7	-51.96	-637.8	840.7	514.9	475.6	39.29	13.104		
6,200.0	6,121.4	6,174.2	6,073.3	19.5	22.1	-53.76	-648.3	855.3	523.4	483.9	39.45	13.266		
6,300.0	6,221.4	6,272.4	6,169.8	19.6	22.4	-55.54	-658.9	869.9	532.3	492.7	39.58	13.448		
6,400.0	6,321.4	6,370.6	6,266.4	19.7	22.8	-57.25	-669.5	884.5	541.7	502.0	39.69	13.648		
6,500.0	6,421.4	6,468.8	6,362.9	19.8	23.2	-58.91	-680.1	899.2	551.6	511.8	39.78	13.866		
6,600.0	6,521.4	6,567.1	6,459.5	19.9	23.5	-60.50	-690.6	913.8	562.0	522.1	39.85	14.100		
6,700.0	6,621.4	6,665.3	6,556.1	20.0	23.9	-62.04	-701.2	928.4	572.7	532.8	39.91	14.349		
6,800.0	6,721.4	6,763.5	6,652.6	20.1	24.3	-63.53	-711.8	943.0	583.9	543.9	39.96	14.611		
6,900.0	6,821.4	6,861.7	6,749.2	20.2	24.6	-64.96	-722.3	957.6	595.5	555.5	40.00	14.885		
7,000.0	6,921.4	6,976.1	6,861.9	20.3	25.0	-66.40	-733.4	972.8	606.1	566.1	40.03	15.143		
7,100.0	7,021.4	7,092.1	6,977.1	20.4	25.3	-67.49	-741.8	984.6	614.3	574.2	40.08	15.326		
7,200.0	7,121.4	7,209.2	7,093.8	20.5	25.5	-68.25	-747.6	992.6	619.8	579.6	40.17	15.427		
7,300.0	7,221.4	7,327.0	7,211.4	20.6	25.6	-68.68	-750.6	996.7	622.5	582.1	40.31	15.442		
7,400.0	7,321.4	7,436.6	7,321.0	20.7	25.7	-68.82	-751.1	997.3	622.6	582.1	40.49	15.376		
7,500.0	7,421.4	7,535.6	7,420.0	20.8	25.8	-68.86	-751.3	996.9	622.4	581.7	40.68	15.299		
7,572.6	7,494.0	7,607.5	7,491.9	20.8	25.9	-68.87	-751.6	996.4	622.3	581.5	40.82	15.244		
7,600.0	7,521.4	7,634.6	7,519.0	20.9	25.9	-68.87	-751.7	996.2	622.4	581.5	40.88	15.224		
7,700.0	7,621.4	7,733.8	7,618.2	21.0	26.0	-68.84	-752.3	995.1	622.5	581.4	41.08	15.151		
7,800.0	7,721.4	7,833.8	7,718.1	21.1	26.1	-68.80	-753.1	993.9	622.7	581.4	41.30	15.077		
7,900.0	7,821.4	7,933.8	7,818.1	21.2	26.1	-68.76	-753.8	992.6	622.8	581.3	41.51	15.004		
8,000.0	7,921.4	8,033.8	7,918.1	21.3	26.2	-68.71	-754.5	991.4	623.0	581.3	41.73	14.931		
8,100.0	8,021.4	8,133.8	8,018.1	21.4	26.3	-68.67	-755.2	990.1	623.2	581.3	41.94	14.858		
8,200.0	8,121.4	8,233.8	8,118.1	21.5	26.4	-68.63	-755.9	988.9	623.4	581.2	42.16	14.785		
8,300.0	8,221.4	8,333.8	8,218.1	21.6	26.5	-68.59	-756.7	987.6	623.6	581.2	42.38	14.712		
8,400.0	8,321.4	8,433.8	8,318.1	21.7	26.6	-68.54	-757.4	986.4	623.7	581.1	42.61	14.640		
8,500.0	8,421.3	8,533.8	8,418.1	21.8	26.7	-68.50	-758.1	985.2	623.9	581.1	42.83	14.567		
8,600.0	8,521.3	8,633.8	8,518.0	21.9	26.7	-68.46	-758.8	983.9	624.1	581.1	43.06	14.495		
8,700.0	8,621.3	8,733.8	8,618.0	22.0	26.8	-68.41	-759.5	982.7	624.3	581.0	43.28	14.423		
8,800.0	8,721.3	8,833.8	8,718.0	22.1	26.9	-68.37	-760.2	981.4	624.5	581.0	43.51	14.351		
8,900.0	8,821.3	8,933.8	8,818.0	22.2	27.0	-68.33	-761.0	980.2	624.7	580.9	43.74	14.280		
9,000.0	8,921.3	9,033.7	8,918.0	22.4	27.1	-68.29	-761.7	978.9	624.8	580.9	43.98	14.208		
9,100.0	9,021.3	9,133.7	9,018.0	22.5	27.2	-68.24	-762.4	977.7	625.0	580.8	44.21	14.137		
9,200.0	9,121.3	9,233.7	9,118.0	22.6	27.3	-68.20	-763.1	976.4	625.2	580.8	44.45	14.066		
9,300.0	9,221.3	9,333.7	9,218.0	22.7	27.4	-68.16	-763.8	975.2	625.4	580.7	44.68	13.996		
9,400.0	9,321.3	9,433.7	9,318.0	22.8	27.5	-68.12	-764.6	974.0	625.6	580.7	44.92	13.926		
9,500.0	9,421.3	9,533.7	9,417.9	22.9	27.6	-68.07	-765.3	972.7	625.8	580.6	45.16	13.856		
9,600.0	9,521.3	9,633.7	9,517.9	23.1	27.7	-68.03	-766.0	971.5	626.0	580.6	45.40	13.786		
9,700.0	9,621.3	9,733.7	9,617.9	23.2	27.8	-67.99	-766.7	970.2	626.1	580.5	45.65	13.717		
9,800.0	9,721.3	9,833.7	9,717.9	23.3	27.9	-67.95	-767.4	969.0	626.3	580.4	45.89	13.648		
9,900.0	9,821.3	9,933.7	9,817.9	23.4	28.0	-67.91	-768.1	967.7	626.5	580.4	46.14	13.580		
10,000.0	9,921.3	10,033.7	9,917.9	23.5	28.1	-67.86	-768.9	966.5	626.7	580.3	46.38	13.511		
10,100.0	10,021.3	10,133.7	10,017.9	23.7	28.2	-67.82	-769.6	965.2	626.9	580.3	46.63	13.444		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-5D - DD - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
10,200.0	10,121.3	10,233.7	10,117.9	23.8	28.3	-67.78	-770.3	964.0	627.1	580.2	46.88	13.376	
10,300.0	10,221.3	10,333.7	10,217.9	23.9	28.4	-67.74	-771.0	962.7	627.3	580.1	47.13	13.309	
10,350.7	10,272.0	10,342.9	10,227.0	24.0	28.4	-67.73	-771.1	962.6	628.7	581.5	47.21	13.319	

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-6D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-106.60	-4.4	-14.7	15.3					
100.0	100.0	100.0	100.0	0.1	0.1	-106.60	-4.4	-14.7	15.3	15.0	0.28	54.787		
200.0	200.0	200.0	200.0	0.3	0.3	-106.60	-4.4	-14.7	15.3	14.7	0.63	24.350 CC		
300.0	300.0	300.4	300.4	0.5	0.5	153.45	-5.2	-13.1	15.6	14.7	0.98	15.959 ES		
400.0	399.8	400.7	400.6	0.7	0.7	148.37	-7.7	-8.5	16.8	15.4	1.35	12.444		
500.0	499.5	501.0	500.5	0.9	0.9	141.36	-11.8	-0.7	18.9	17.2	1.76	10.737		
600.0	598.7	601.3	600.0	1.2	1.2	133.97	-17.6	10.1	22.3	20.0	2.26	9.859		
700.0	697.5	701.4	698.9	1.5	1.5	127.29	-25.0	23.9	27.0	24.1	2.87	9.396		
800.0	795.9	801.2	797.2	1.8	1.8	122.43	-33.2	39.3	32.5	29.0	3.52	9.223		
900.0	894.4	901.1	895.5	2.2	2.2	119.00	-41.4	54.6	38.2	34.0	4.20	9.101		
1,000.0	992.9	1,000.9	993.7	2.5	2.5	116.47	-49.7	69.9	44.0	39.1	4.88	9.015		
1,100.0	1,091.3	1,100.7	1,092.0	2.9	2.9	114.53	-57.9	85.2	49.9	44.3	5.57	8.952		
1,200.0	1,189.8	1,200.5	1,190.3	3.2	3.2	113.00	-66.1	100.6	55.8	49.5	6.26	8.906		
1,300.0	1,288.2	1,300.3	1,288.6	3.6	3.6	111.77	-74.3	115.9	61.7	54.8	6.96	8.871		
1,400.0	1,386.7	1,400.1	1,386.9	3.9	3.9	110.75	-82.5	131.2	67.7	60.0	7.65	8.844		
1,500.0	1,485.2	1,500.0	1,485.2	4.3	4.3	109.90	-90.7	146.5	73.7	65.3	8.35	8.823		
1,600.0	1,583.6	1,599.8	1,583.5	4.6	4.6	109.18	-98.9	161.9	79.7	70.6	9.05	8.806		
1,700.0	1,682.1	1,699.6	1,681.8	5.0	5.0	108.55	-107.1	177.2	85.7	76.0	9.75	8.792		
1,800.0	1,780.6	1,799.4	1,780.1	5.3	5.3	108.01	-115.3	192.5	91.7	81.3	10.45	8.781		
1,900.0	1,879.0	1,899.2	1,878.3	5.7	5.7	107.54	-123.5	207.9	97.8	86.6	11.15	8.771		
2,000.0	1,977.5	1,999.0	1,976.6	6.0	6.0	107.12	-131.7	223.2	103.8	91.9	11.84	8.763		
2,100.0	2,075.9	2,098.8	2,074.9	6.4	6.4	106.75	-139.9	238.5	109.8	97.3	12.54	8.756		
2,200.0	2,174.4	2,198.7	2,173.2	6.7	6.7	106.41	-148.1	253.8	115.9	102.6	13.24	8.750		
2,300.0	2,272.9	2,298.5	2,271.5	7.1	7.1	106.11	-156.3	269.2	121.9	108.0	13.94	8.745		
2,400.0	2,371.3	2,398.3	2,369.8	7.4	7.4	105.84	-164.6	284.5	128.0	113.3	14.64	8.740		
2,500.0	2,469.8	2,498.1	2,468.1	7.8	7.8	105.59	-172.8	299.8	134.0	118.7	15.34	8.736		
2,600.0	2,568.2	2,597.9	2,566.4	8.2	8.1	105.36	-181.0	315.2	140.1	124.0	16.04	8.733		
2,700.0	2,666.7	2,697.7	2,664.7	8.5	8.5	105.16	-189.2	330.5	146.1	129.4	16.74	8.730		
2,800.0	2,765.2	2,797.5	2,762.9	8.9	8.8	104.96	-197.4	345.8	152.2	134.8	17.44	8.727		
2,900.0	2,863.6	2,897.4	2,861.2	9.2	9.2	104.79	-205.6	361.1	158.3	140.1	18.14	8.725		
3,000.0	2,962.1	2,997.2	2,959.5	9.6	9.5	104.62	-213.8	376.5	164.3	145.5	18.84	8.722		
3,100.0	3,060.6	3,097.0	3,057.8	9.9	9.9	104.47	-222.0	391.8	170.4	150.8	19.54	8.720		
3,200.0	3,159.0	3,196.8	3,156.1	10.3	10.2	104.33	-230.2	407.1	176.4	156.2	20.24	8.719		
3,300.0	3,257.5	3,296.6	3,254.4	10.6	10.6	104.20	-238.4	422.5	182.5	161.6	20.94	8.717		
3,400.0	3,355.9	3,396.4	3,352.7	11.0	10.9	104.08	-246.6	437.8	188.6	166.9	21.64	8.715		
3,500.0	3,454.4	3,496.3	3,451.0	11.3	11.3	103.96	-254.8	453.1	194.6	172.3	22.34	8.714		
3,600.0	3,552.9	3,596.1	3,549.3	11.7	11.6	103.85	-263.0	468.4	200.7	177.7	23.04	8.713		
3,700.0	3,651.3	3,695.9	3,647.5	12.1	12.0	103.75	-271.2	483.8	206.8	183.0	23.74	8.712		
3,800.0	3,749.8	3,795.7	3,745.8	12.4	12.3	103.65	-279.4	499.1	212.8	188.4	24.43	8.710		
3,900.0	3,848.3	3,895.5	3,844.1	12.8	12.7	103.56	-287.7	514.4	218.9	193.8	25.13	8.709		
4,000.0	3,946.7	3,995.3	3,942.4	13.1	13.1	103.47	-295.9	529.7	225.0	199.1	25.83	8.709		
4,100.0	4,045.2	4,095.1	4,040.7	13.5	13.4	103.39	-304.1	545.1	231.0	204.5	26.53	8.708		
4,200.0	4,143.6	4,195.0	4,139.0	13.8	13.8	103.31	-312.3	560.4	237.1	209.9	27.23	8.707		
4,300.0	4,242.1	4,294.8	4,237.3	14.2	14.1	103.24	-320.5	575.7	243.2	215.3	27.93	8.706		
4,400.0	4,340.6	4,394.6	4,335.6	14.5	14.5	103.17	-328.7	591.1	249.3	220.6	28.63	8.705		
4,500.0	4,439.0	4,494.4	4,433.9	14.9	14.8	103.10	-336.9	606.4	255.3	226.0	29.33	8.705		
4,600.0	4,537.5	4,594.2	4,532.2	15.2	15.2	103.04	-345.1	621.7	261.4	231.4	30.03	8.704		
4,700.0	4,636.0	4,694.0	4,630.4	15.6	15.5	102.98	-353.3	637.0	267.5	236.7	30.73	8.704		
4,800.0	4,734.4	4,793.8	4,728.7	16.0	15.9	102.92	-361.5	652.4	273.6	242.1	31.43	8.703		
4,900.0	4,832.9	4,893.7	4,827.0	16.3	16.2	102.87	-369.7	667.7	279.6	247.5	32.13	8.703		
5,000.0	4,931.3	4,993.5	4,925.3	16.7	16.6	102.81	-377.9	683.0	285.7	252.9	32.83	8.702		
5,100.0	5,029.8	5,093.3	5,023.6	17.0	16.9	102.76	-386.1	698.4	291.8	258.2	33.53	8.702		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		Chevron E05 696 - Chevron 5-6D - DD - Plan #1											Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,128.3	5,193.1	5,121.9	17.4	17.3	102.71	-394.3	713.7	297.8	263.6	34.23	8.701		
5,300.0	5,226.7	5,292.9	5,220.2	17.7	17.6	102.66	-402.6	729.0	303.9	269.0	34.93	8.701		
5,400.0	5,325.2	5,392.7	5,318.5	18.1	18.0	102.62	-410.8	744.3	310.0	274.4	35.63	8.700		
5,500.0	5,423.7	5,492.6	5,416.8	18.4	18.3	102.59	-419.0	759.7	316.0	279.7	36.33	8.700		
5,600.0	5,522.6	5,592.4	5,515.0	18.7	18.7	102.20	-427.2	775.0	321.6	284.6	36.98	8.696		
5,700.0	5,621.9	5,692.1	5,613.2	19.0	19.0	101.22	-435.4	790.3	326.4	288.8	37.58	8.686		
5,800.0	5,721.6	5,791.5	5,711.1	19.2	19.4	99.67	-443.5	805.6	330.8	292.7	38.12	8.678		
5,900.0	5,821.5	5,890.6	5,808.7	19.3	19.7	97.59	-451.7	820.8	334.9	296.4	38.57	8.684		
6,000.0	5,921.5	5,989.4	5,906.0	19.4	20.1	-46.93	-459.8	836.0	339.3	300.3	38.91	8.718		
6,100.0	6,021.5	6,091.7	6,007.0	19.5	20.4	-49.52	-467.3	849.9	343.5	304.3	39.15	8.772		
6,200.0	6,121.4	6,194.9	6,109.5	19.5	20.7	-51.55	-473.1	860.8	346.8	307.5	39.33	8.819		
6,300.0	6,221.4	6,299.0	6,213.2	19.6	20.9	-53.01	-477.2	868.4	349.2	309.7	39.47	8.846		
6,400.0	6,321.4	6,403.5	6,317.7	19.7	21.0	-53.89	-479.5	872.7	350.4	310.7	39.61	8.844		
6,500.0	6,421.4	6,507.1	6,421.2	19.8	21.1	-54.19	-480.1	873.8	350.2	310.5	39.77	8.807		
6,600.0	6,521.4	6,606.2	6,520.4	19.9	21.2	-54.28	-480.2	873.5	349.9	309.9	39.94	8.759		
6,695.2	6,616.7	6,700.6	6,614.7	20.0	21.3	-54.30	-480.6	872.9	349.8	309.6	40.11	8.720		
6,700.0	6,621.4	6,705.4	6,619.5	20.0	21.3	-54.30	-480.6	872.9	349.8	309.6	40.12	8.718		
6,800.0	6,721.4	6,805.1	6,719.2	20.1	21.4	-54.29	-481.1	872.0	349.8	309.5	40.30	8.680		
6,900.0	6,821.4	6,905.1	6,819.2	20.2	21.4	-54.27	-481.7	871.0	349.9	309.4	40.49	8.642		
7,000.0	6,921.4	7,005.1	6,919.2	20.3	21.5	-54.25	-482.2	870.1	350.0	309.3	40.68	8.604		
7,100.0	7,021.4	7,105.1	7,019.2	20.4	21.6	-54.23	-482.7	869.2	350.1	309.2	40.87	8.566		
7,200.0	7,121.4	7,205.1	7,119.2	20.5	21.7	-54.21	-483.3	868.2	350.2	309.1	41.06	8.528		
7,300.0	7,221.4	7,305.1	7,219.2	20.6	21.8	-54.20	-483.8	867.3	350.2	309.0	41.25	8.490		
7,400.0	7,321.4	7,405.1	7,319.2	20.7	21.9	-54.18	-484.3	866.4	350.3	308.9	41.45	8.452		
7,500.0	7,421.4	7,505.1	7,419.2	20.8	22.0	-54.16	-484.9	865.4	350.4	308.8	41.64	8.414		
7,600.0	7,521.4	7,605.1	7,519.2	20.9	22.1	-54.14	-485.4	864.5	350.5	308.6	41.84	8.376		
7,700.0	7,621.4	7,705.1	7,619.2	21.0	22.2	-54.12	-486.0	863.6	350.6	308.5	42.05	8.337		
7,800.0	7,721.4	7,805.1	7,719.2	21.1	22.3	-54.11	-486.5	862.7	350.6	308.4	42.25	8.299		
7,900.0	7,821.4	7,905.1	7,819.2	21.2	22.4	-54.09	-487.0	861.7	350.7	308.3	42.46	8.261		
8,000.0	7,921.4	8,005.1	7,919.2	21.3	22.5	-54.07	-487.6	860.8	350.8	308.1	42.66	8.222		
8,100.0	8,021.4	8,105.1	8,019.1	21.4	22.6	-54.05	-488.1	859.9	350.9	308.0	42.87	8.184		
8,200.0	8,121.4	8,205.1	8,119.1	21.5	22.7	-54.03	-488.6	858.9	351.0	307.9	43.08	8.146		
8,300.0	8,221.4	8,305.1	8,219.1	21.6	22.8	-54.01	-489.2	858.0	351.0	307.7	43.30	8.108		
8,400.0	8,321.4	8,405.1	8,319.1	21.7	22.9	-54.00	-489.7	857.1	351.1	307.6	43.51	8.069		
8,500.0	8,421.3	8,505.1	8,419.1	21.8	23.0	-53.98	-490.3	856.1	351.2	307.5	43.73	8.031		
8,600.0	8,521.3	8,605.1	8,519.1	21.9	23.1	-53.96	-490.8	855.2	351.3	307.3	43.95	7.993		
8,700.0	8,621.3	8,705.1	8,619.1	22.0	23.2	-53.94	-491.3	854.3	351.4	307.2	44.17	7.955		
8,800.0	8,721.3	8,805.1	8,719.1	22.1	23.3	-53.92	-491.9	853.3	351.4	307.1	44.39	7.917		
8,900.0	8,821.3	8,905.1	8,819.1	22.2	23.4	-53.91	-492.4	852.4	351.5	306.9	44.61	7.880		
9,000.0	8,921.3	9,005.1	8,919.1	22.4	23.5	-53.89	-493.0	851.5	351.6	306.8	44.84	7.842		
9,100.0	9,021.3	9,105.1	9,019.1	22.5	23.7	-53.87	-493.5	850.6	351.7	306.6	45.06	7.804		
9,200.0	9,121.3	9,205.1	9,119.1	22.6	23.8	-53.85	-494.0	849.6	351.8	306.5	45.29	7.767		
9,300.0	9,221.3	9,305.1	9,219.1	22.7	23.9	-53.83	-494.6	848.7	351.9	306.3	45.52	7.729		
9,400.0	9,321.3	9,405.1	9,319.1	22.8	24.0	-53.82	-495.1	847.8	351.9	306.2	45.75	7.692		
9,500.0	9,421.3	9,505.1	9,419.1	22.9	24.1	-53.80	-495.6	846.8	352.0	306.0	45.99	7.655		
9,600.0	9,521.3	9,605.1	9,519.1	23.1	24.2	-53.78	-496.2	845.9	352.1	305.9	46.22	7.618		
9,700.0	9,621.3	9,705.1	9,619.1	23.2	24.3	-53.76	-496.7	845.0	352.2	305.7	46.46	7.581		
9,800.0	9,721.3	9,805.1	9,719.0	23.3	24.4	-53.74	-497.3	844.0	352.3	305.6	46.69	7.544		
9,900.0	9,821.3	9,905.1	9,819.0	23.4	24.6	-53.73	-497.8	843.1	352.3	305.4	46.93	7.508		
10,000.0	9,921.3	10,005.1	9,919.0	23.5	24.7	-53.71	-498.3	842.2	352.4	305.3	47.17	7.471		
10,100.0	10,021.3	10,105.1	10,019.0	23.7	24.8	-53.69	-498.9	841.2	352.5	305.1	47.41	7.435		
10,200.0	10,121.3	10,205.1	10,119.0	23.8	24.9	-53.67	-499.4	840.3	352.6	304.9	47.66	7.399		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-6D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,300.0	10,221.3	10,305.1	10,219.0	23.9	25.0	-53.65	-499.9	839.4	352.7	304.8	47.90	7.363		
10,313.5	10,234.7	10,318.6	10,232.5	23.9	25.0	-53.65	-500.0	839.3	352.7	304.7	47.93	7.358 SF		
10,350.7	10,272.0	10,333.1	10,247.0	24.0	25.1	-53.65	-500.1	839.1	353.4	305.4	48.00	7.364		

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-8D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	74.41	4.0	14.4	14.9					
100.0	100.0	100.0	100.0	0.1	0.1	74.41	4.0	14.4	14.9	14.6	0.28	53.460		
200.0	200.0	200.0	200.0	0.3	0.3	74.41	4.0	14.4	14.9	14.3	0.63	23.760 CC		
300.0	300.0	299.5	299.5	0.5	0.5	-25.95	4.4	16.1	15.1	14.1	0.98	15.431 ES		
400.0	399.8	398.9	398.8	0.7	0.7	-32.45	5.5	21.1	15.7	14.3	1.33	11.751		
500.0	499.5	498.3	497.8	0.9	0.9	-42.07	7.3	29.5	17.0	15.3	1.72	9.910		
600.0	598.7	597.7	596.4	1.2	1.2	-52.81	9.9	41.3	19.6	17.4	2.18	8.976		
700.0	697.5	697.0	694.5	1.5	1.5	-62.72	13.2	56.4	23.6	20.8	2.77	8.518		
800.0	795.9	796.7	792.7	1.8	1.8	-70.23	16.9	73.4	28.8	25.3	3.43	8.379		
900.0	894.4	896.5	891.0	2.2	2.2	-75.41	20.6	90.4	34.2	30.1	4.12	8.319		
1,000.0	992.9	996.4	989.3	2.5	2.5	-79.13	24.3	107.4	39.9	35.1	4.81	8.301		
1,100.0	1,091.3	1,096.2	1,087.6	2.9	2.8	-81.92	28.0	124.4	45.8	40.2	5.51	8.303		
1,200.0	1,189.8	1,196.0	1,185.8	3.2	3.2	-84.08	31.7	141.4	51.6	45.4	6.21	8.316		
1,300.0	1,288.2	1,295.8	1,284.1	3.6	3.5	-85.79	35.4	158.4	57.6	50.7	6.91	8.333		
1,400.0	1,386.7	1,395.6	1,382.4	3.9	3.9	-87.18	39.1	175.5	63.6	56.0	7.61	8.353		
1,500.0	1,485.2	1,495.4	1,480.7	4.3	4.2	-88.33	42.8	192.5	69.6	61.3	8.32	8.372		
1,600.0	1,583.6	1,595.2	1,578.9	4.6	4.6	-89.30	46.5	209.5	75.7	66.7	9.02	8.392		
1,700.0	1,682.1	1,695.0	1,677.2	5.0	4.9	-90.13	50.2	226.5	81.8	72.0	9.72	8.410		
1,800.0	1,780.6	1,794.8	1,775.5	5.3	5.3	-90.83	53.9	243.5	87.8	77.4	10.42	8.427		
1,900.0	1,879.0	1,894.6	1,873.8	5.7	5.7	-91.45	57.6	260.5	93.9	82.8	11.12	8.444		
2,000.0	1,977.5	1,994.4	1,972.1	6.0	6.0	-91.99	61.4	277.5	100.0	88.2	11.83	8.459		
2,100.0	2,075.9	2,094.3	2,070.3	6.4	6.4	-92.47	65.1	294.5	106.2	93.6	12.53	8.473		
2,200.0	2,174.4	2,194.1	2,168.6	6.7	6.7	-92.90	68.8	311.5	112.3	99.0	13.23	8.487		
2,300.0	2,272.9	2,293.9	2,266.9	7.1	7.1	-93.29	72.5	328.6	118.4	104.5	13.93	8.499		
2,400.0	2,371.3	2,393.7	2,365.2	7.4	7.4	-93.63	76.2	345.6	124.5	109.9	14.63	8.511		
2,500.0	2,469.8	2,493.5	2,463.5	7.8	7.8	-93.94	79.9	362.6	130.7	115.3	15.33	8.521		
2,600.0	2,568.2	2,593.3	2,561.7	8.2	8.1	-94.23	83.6	379.6	136.8	120.8	16.03	8.532		
2,700.0	2,666.7	2,693.1	2,660.0	8.5	8.5	-94.49	87.3	396.6	142.9	126.2	16.74	8.541		
2,800.0	2,765.2	2,792.9	2,758.3	8.9	8.8	-94.73	91.0	413.6	149.1	131.6	17.44	8.550		
2,900.0	2,863.6	2,892.7	2,856.6	9.2	9.2	-94.95	94.7	430.6	155.2	137.1	18.14	8.558		
3,000.0	2,962.1	2,992.5	2,954.9	9.6	9.5	-95.15	98.4	447.6	161.4	142.5	18.84	8.566		
3,100.0	3,060.6	3,092.3	3,053.1	9.9	9.9	-95.34	102.1	464.6	167.5	148.0	19.54	8.574		
3,200.0	3,159.0	3,192.2	3,151.4	10.3	10.2	-95.52	105.8	481.7	173.7	153.4	20.24	8.581		
3,300.0	3,257.5	3,292.0	3,249.7	10.6	10.6	-95.68	109.5	498.7	179.8	158.9	20.94	8.587		
3,400.0	3,355.9	3,391.8	3,348.0	11.0	10.9	-95.83	113.3	515.7	186.0	164.4	21.64	8.594		
3,500.0	3,454.4	3,491.6	3,446.2	11.3	11.3	-95.98	117.0	532.7	192.1	169.8	22.34	8.600		
3,600.0	3,552.9	3,591.4	3,544.5	11.7	11.7	-96.11	120.7	549.7	198.3	175.3	23.05	8.605		
3,700.0	3,651.3	3,691.2	3,642.8	12.1	12.0	-96.23	124.4	566.7	204.5	180.7	23.75	8.611		
3,800.0	3,749.8	3,791.0	3,741.1	12.4	12.4	-96.35	128.1	583.7	210.6	186.2	24.45	8.616		
3,900.0	3,848.3	3,890.8	3,839.4	12.8	12.7	-96.46	131.8	600.7	216.8	191.6	25.15	8.620		
4,000.0	3,946.7	3,990.6	3,937.6	13.1	13.1	-96.57	135.5	617.7	222.9	197.1	25.85	8.625		
4,100.0	4,045.2	4,090.4	4,035.9	13.5	13.4	-96.67	139.2	634.8	229.1	202.6	26.55	8.629		
4,200.0	4,143.6	4,190.2	4,134.2	13.8	13.8	-96.76	142.9	651.8	235.3	208.0	27.25	8.634		
4,300.0	4,242.1	4,290.1	4,232.5	14.2	14.1	-96.85	146.6	668.8	241.4	213.5	27.95	8.638		
4,400.0	4,340.6	4,389.9	4,330.8	14.5	14.5	-96.94	150.3	685.8	247.6	218.9	28.65	8.642		
4,500.0	4,439.0	4,489.7	4,429.0	14.9	14.8	-97.02	154.0	702.8	253.8	224.4	29.35	8.645		
4,600.0	4,537.5	4,589.5	4,527.3	15.2	15.2	-97.10	157.7	719.8	259.9	229.9	30.05	8.649		
4,700.0	4,636.0	4,689.3	4,625.6	15.6	15.5	-97.17	161.4	736.8	266.1	235.3	30.75	8.652		
4,800.0	4,734.4	4,789.1	4,723.9	16.0	15.9	-97.24	165.1	753.8	272.3	240.8	31.45	8.655		
4,900.0	4,832.9	4,888.9	4,822.2	16.3	16.3	-97.31	168.9	770.8	278.4	246.3	32.16	8.659		
5,000.0	4,931.3	4,988.7	4,920.4	16.7	16.6	-97.37	172.6	787.9	284.6	251.7	32.86	8.662		
5,100.0	5,029.8	5,088.5	5,018.7	17.0	17.0	-97.43	176.3	804.9	290.8	257.2	33.56	8.665		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Chevron E05 696 - Chevron 5-8D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
5,200.0	5,128.3	5,188.3	5,117.0	17.4	17.3	-97.49	180.0	821.9	296.9	262.7	34.26	8.667		
5,300.0	5,226.7	5,288.1	5,215.3	17.7	17.7	-97.55	183.7	838.9	303.1	268.1	34.96	8.670		
5,400.0	5,325.2	5,388.0	5,313.6	18.1	18.0	-97.60	187.4	855.9	309.3	273.6	35.66	8.673		
5,500.0	5,423.7	5,488.1	5,412.1	18.4	18.4	-97.67	191.1	872.9	315.4	279.0	36.36	8.675		
5,600.0	5,522.6	5,590.4	5,513.2	18.7	18.7	-97.75	194.4	888.2	320.7	283.8	36.95	8.681		
5,700.0	5,621.9	5,692.8	5,614.9	19.0	18.9	-97.81	197.0	899.9	324.9	287.4	37.43	8.679		
5,800.0	5,721.6	5,795.2	5,717.0	19.2	19.1	-97.85	198.8	908.1	327.7	289.9	37.81	8.668		
5,900.0	5,821.5	5,897.8	5,819.5	19.3	19.3	-97.88	199.8	912.7	329.3	291.2	38.08	8.648		
6,000.0	5,921.5	5,999.9	5,921.6	19.4	19.4	120.19	200.0	913.8	329.7	291.4	38.27	8.615		
6,100.0	6,021.5	6,100.7	6,022.3	19.5	19.4	120.19	199.8	913.5	329.7	291.3	38.45	8.575		
6,199.7	6,121.1	6,201.0	6,122.7	19.5	19.5	120.19	199.5	912.9	329.7	291.1	38.62	8.537		
6,200.0	6,121.4	6,201.3	6,123.0	19.5	19.5	120.19	199.5	912.9	329.7	291.1	38.62	8.537		
6,300.0	6,221.4	6,301.3	6,223.0	19.6	19.6	120.19	199.0	912.1	329.7	290.9	38.79	8.499		
6,400.0	6,321.4	6,401.3	6,323.0	19.7	19.7	120.19	198.5	911.3	329.7	290.7	38.97	8.461		
6,500.0	6,421.4	6,501.3	6,423.0	19.8	19.8	120.19	198.1	910.5	329.7	290.6	39.15	8.422		
6,600.0	6,521.4	6,601.3	6,523.0	19.9	19.9	120.19	197.6	909.7	329.7	290.4	39.33	8.384		
6,700.0	6,621.4	6,701.3	6,623.0	20.0	20.0	120.19	197.1	908.8	329.7	290.2	39.51	8.345		
6,800.0	6,721.4	6,801.3	6,723.0	20.1	20.0	120.19	196.7	908.0	329.7	290.0	39.69	8.306		
6,900.0	6,821.4	6,901.3	6,823.0	20.2	20.1	120.19	196.2	907.2	329.7	289.8	39.88	8.267		
7,000.0	6,921.4	7,001.3	6,923.0	20.3	20.2	120.19	195.7	906.4	329.7	289.6	40.07	8.228		
7,100.0	7,021.4	7,101.3	7,023.0	20.4	20.3	120.19	195.3	905.6	329.7	289.5	40.26	8.189		
7,200.0	7,121.4	7,201.3	7,123.0	20.5	20.4	120.20	194.8	904.8	329.7	289.3	40.46	8.150		
7,300.0	7,221.4	7,301.3	7,223.0	20.6	20.5	120.20	194.3	904.0	329.7	289.1	40.65	8.111		
7,400.0	7,321.4	7,401.3	7,322.9	20.7	20.6	120.20	193.9	903.2	329.7	288.9	40.85	8.072		
7,500.0	7,421.4	7,501.3	7,422.9	20.8	20.7	120.20	193.4	902.4	329.7	288.7	41.05	8.033		
7,600.0	7,521.4	7,601.3	7,522.9	20.9	20.8	120.20	192.9	901.6	329.7	288.5	41.25	7.993		
7,700.0	7,621.4	7,701.3	7,622.9	21.0	20.9	120.20	192.5	900.7	329.7	288.3	41.45	7.954		
7,800.0	7,721.4	7,801.3	7,722.9	21.1	21.0	120.20	192.0	899.9	329.7	288.1	41.66	7.915		
7,900.0	7,821.4	7,901.3	7,822.9	21.2	21.1	120.20	191.5	899.1	329.7	287.9	41.87	7.876		
8,000.0	7,921.4	8,001.3	7,922.9	21.3	21.2	120.20	191.0	898.3	329.7	287.6	42.07	7.837		
8,100.0	8,021.4	8,101.3	8,022.9	21.4	21.3	120.20	190.6	897.5	329.7	287.4	42.29	7.797		
8,200.0	8,121.4	8,201.3	8,122.9	21.5	21.4	120.20	190.1	896.7	329.7	287.2	42.50	7.758		
8,300.0	8,221.4	8,301.3	8,222.9	21.6	21.5	120.20	189.6	895.9	329.7	287.0	42.71	7.719		
8,400.0	8,321.4	8,401.3	8,322.9	21.7	21.6	120.20	189.2	895.1	329.7	286.8	42.93	7.680		
8,500.0	8,421.3	8,501.3	8,422.9	21.8	21.7	120.20	188.7	894.3	329.7	286.6	43.15	7.642		
8,600.0	8,521.3	8,601.3	8,522.9	21.9	21.8	120.20	188.2	893.5	329.7	286.4	43.37	7.603		
8,700.0	8,621.3	8,701.3	8,622.9	22.0	22.0	120.20	187.8	892.7	329.7	286.1	43.59	7.564		
8,800.0	8,721.3	8,801.3	8,722.9	22.1	22.1	120.20	187.3	891.8	329.7	285.9	43.81	7.526		
8,900.0	8,821.3	8,901.3	8,822.9	22.2	22.2	120.20	186.8	891.0	329.7	285.7	44.04	7.487		
9,000.0	8,921.3	9,001.3	8,922.9	22.4	22.3	120.20	186.4	890.2	329.7	285.5	44.27	7.449		
9,100.0	9,021.3	9,101.3	9,022.9	22.5	22.4	120.20	185.9	889.4	329.7	285.2	44.49	7.411		
9,200.0	9,121.3	9,201.3	9,122.9	22.6	22.5	120.20	185.4	888.6	329.7	285.0	44.72	7.373		
9,300.0	9,221.3	9,301.3	9,222.9	22.7	22.6	120.20	185.0	887.8	329.7	284.8	44.96	7.335		
9,400.0	9,321.3	9,401.3	9,322.9	22.8	22.7	120.20	184.5	887.0	329.7	284.5	45.19	7.297		
9,500.0	9,421.3	9,501.3	9,422.9	22.9	22.9	120.20	184.0	886.2	329.7	284.3	45.42	7.259		
9,600.0	9,521.3	9,601.3	9,522.9	23.1	23.0	120.21	183.6	885.4	329.7	284.1	45.66	7.222		
9,700.0	9,621.3	9,701.3	9,622.8	23.2	23.1	120.21	183.1	884.6	329.7	283.8	45.90	7.184		
9,800.0	9,721.3	9,801.3	9,722.8	23.3	23.2	120.21	182.6	883.7	329.7	283.6	46.14	7.147		
9,900.0	9,821.3	9,901.3	9,822.8	23.4	23.3	120.21	182.2	882.9	329.7	283.4	46.38	7.110		
10,000.0	9,921.3	10,001.3	9,922.8	23.5	23.4	120.21	181.7	882.1	329.7	283.1	46.62	7.073		
10,100.0	10,021.3	10,101.3	10,022.8	23.7	23.6	120.21	181.2	881.3	329.7	282.9	46.86	7.037		
10,200.0	10,121.3	10,201.3	10,122.8	23.8	23.7	120.21	180.8	880.5	329.7	282.6	47.10	7.000		

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

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Chevron E05 696 - Chevron 5-8D - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis						
10,300.0	10,221.3	10,301.3	10,222.8	23.9	23.8	120.21	180.3	879.7	329.7	282.4	47.35	6.964					
10,350.7	10,272.0	10,352.1	10,273.6	24.0	23.9	120.21	180.0	879.3	329.7	282.3	47.48	6.945 SF					

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Chevron 5-7D
Project:	Garfield County	TVD Reference:	WELL @ 8144.0ft (Original Well Elev)
Reference Site:	Chevron E05 696	MD Reference:	WELL @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Chevron 5-7D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 8144.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Chevron 5-7D

Coordinate System is US State Plane 1983, Colorado Central Zone

Grid Convergence at Surface is: -1.66°

