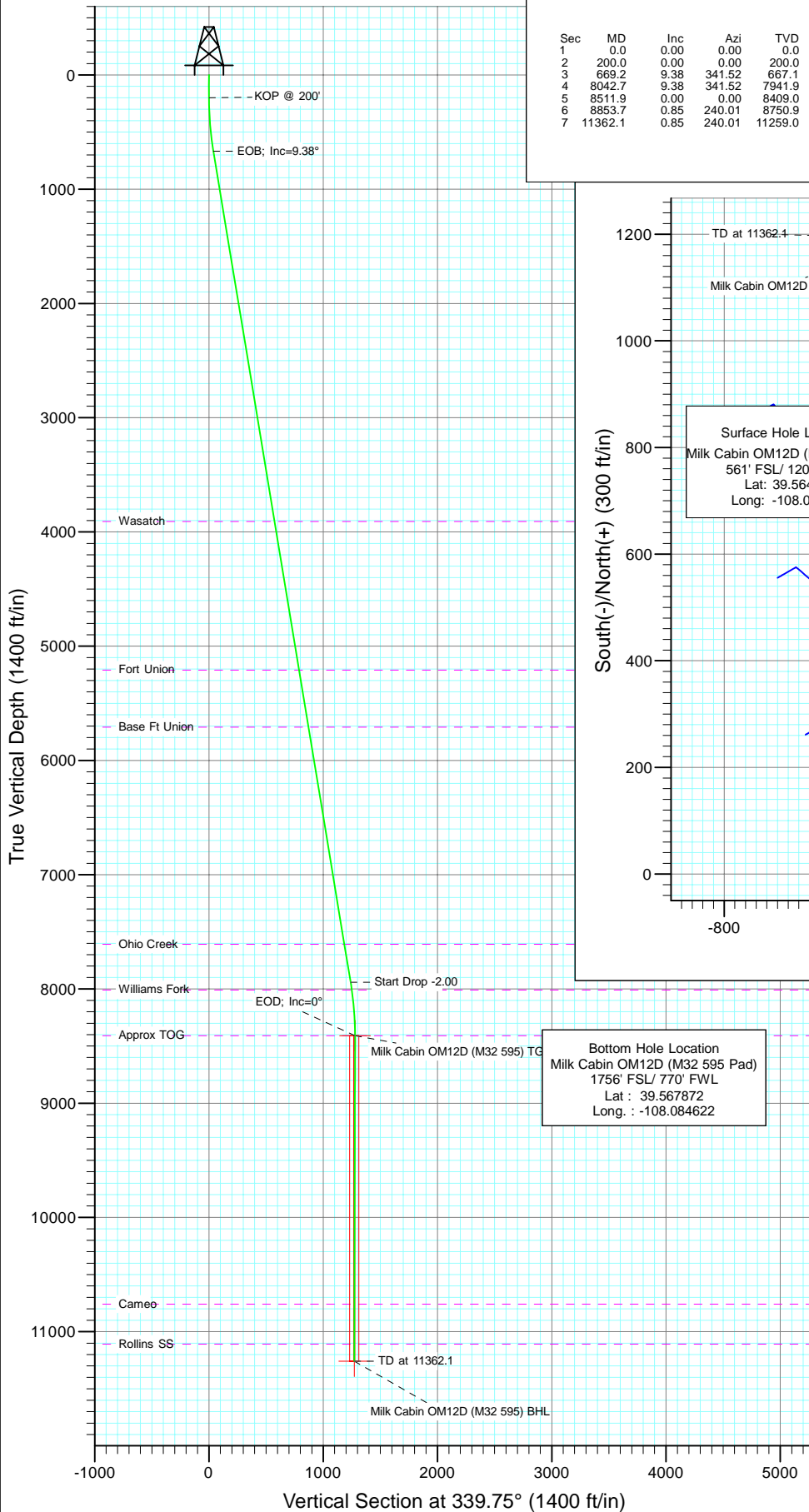
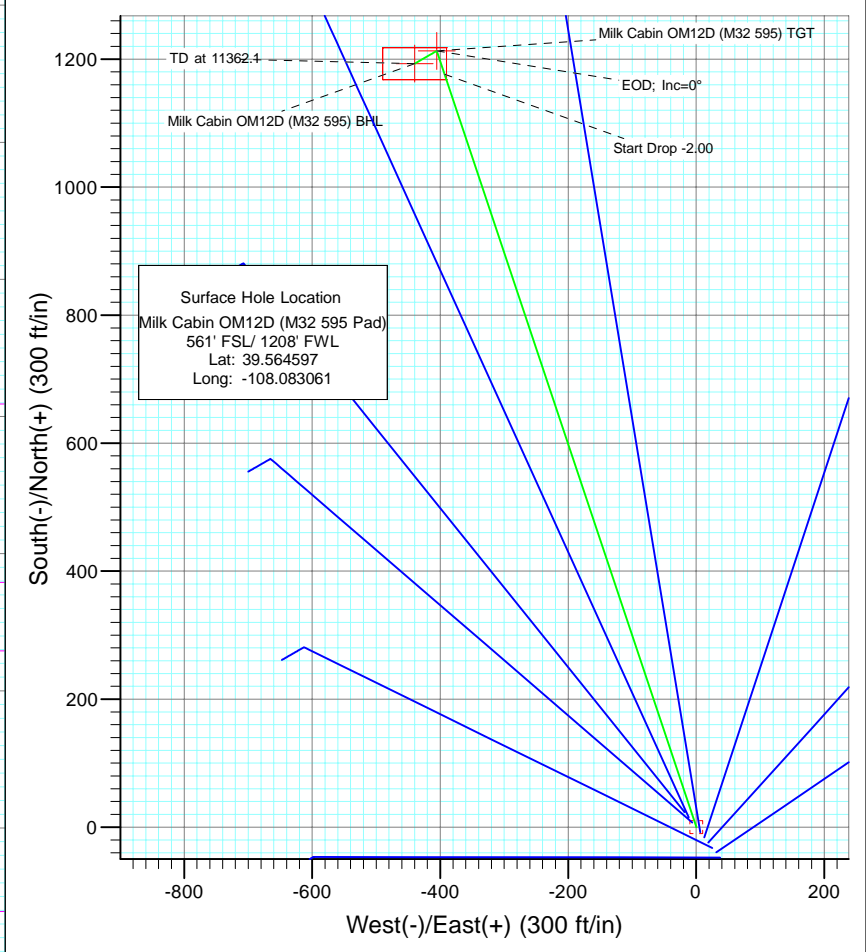




Project: Garfield County
Site: SWSW S32-T5S-R95W (M32 595 Pad)
Well: Milk Cabin OM12D (M32 595 Pad)
Wellbore: DD
Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	669.2	9.38	341.52	667.1	36.4	-12.2	2.00	341.52	38.3	
4	8042.7	9.38	341.52	7941.9	1176.5	-393.3	0.00	0.00	1240.0	
5	8511.9	0.00	0.00	8409.0	1212.9	-405.5	2.00	180.00	1278.3	Milk Cabin OM12D (M32 595) TGT
6	8853.7	0.85	240.01	8750.9	1211.6	-407.7	0.25	240.01	1277.8	
7	11362.1	0.85	240.01	11259.0	1192.9	-440.1	0.00	0.00	1271.5	Milk Cabin OM12D (M32 595) BHL



Azimuths to True North
Magnetic North: 10.53°

Magnetic Field
Strength: 52359.4snT
Dip Angle: 65.81°
Date: 6/16/2010
Model: IGRF2010

FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
3909.0	3955.1	Wasatch
5209.0	5272.7	Fort Union
5709.0	5779.5	Base Ft Union
7609.0	7705.2	Ohio Creek
8009.0	8110.5	Williams Fork
8409.0	8511.9	Approx TOG
10759.0	10862.1	Cameo
11109.0	11212.1	Rollins SS

DESIGN DETAILS: Plan #1

105XXX; BH
KBE @ 8144.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From TVD
Milk Cabin OM12D (M32 595)	341.52	Slot	0.0	0.0	0.0

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site:	SWSW S32-T5S-R95W (M32 595 Pad)	North Reference:	True
Well:	Milk Cabin OM12D (M32 595 Pad)	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		SWSW S32-T5S-R95W (M32 595 Pad)			
Site Position:		Northing:	1,640,872.06 ft	Latitude:	39.564553
From:	Lat/Long	Easting:	2,271,884.01 ft	Longitude:	-108.083017
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.63 °

Well	Milk Cabin OM12D (M32 595 Pad)					
Well Position	+N/-S	0.0 ft	Northing:	1,640,888.43 ft	Latitude:	39.564597
	+E/-W	0.0 ft	Easting:	2,271,872.07 ft	Longitude:	-108.083061
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,121.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/16/2010	10.53	65.81	52,359

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	339.75

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	
669.2	9.38	341.52	667.1	36.4	-12.2	2.00	2.00	0.00	341.52	
8,042.7	9.38	341.52	7,941.9	1,176.5	-393.3	0.00	0.00	0.00	0.00	
8,511.9	0.00	0.00	8,409.0	1,212.9	-405.5	2.00	-2.00	0.00	180.00	Milk Cabin OM12D (N
8,853.7	0.85	240.01	8,750.9	1,211.6	-407.7	0.25	0.25	-35.10	240.01	
11,362.1	0.85	240.01	11,259.0	1,192.9	-440.1	0.00	0.00	0.00	0.00	Milk Cabin OM12D (N

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site:	SWSW S32-T5S-R95W (M32 595 Pad)	North Reference:	True
Well:	Milk Cabin OM12D (M32 595 Pad)	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	341.52	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	341.52	240.0	0.3	-0.1	0.3	2.00	2.00	
270.0	1.40	341.52	270.0	0.8	-0.3	0.9	2.00	2.00	
300.0	2.00	341.52	300.0	1.7	-0.6	1.7	2.00	2.00	
330.0	2.60	341.52	330.0	2.8	-0.9	2.9	2.00	2.00	
360.0	3.20	341.52	359.9	4.2	-1.4	4.5	2.00	2.00	
390.0	3.80	341.52	389.9	6.0	-2.0	6.3	2.00	2.00	
420.0	4.40	341.52	419.8	8.0	-2.7	8.4	2.00	2.00	
450.0	5.00	341.52	449.7	10.3	-3.5	10.9	2.00	2.00	
480.0	5.60	341.52	479.6	13.0	-4.3	13.7	2.00	2.00	
510.0	6.20	341.52	509.4	15.9	-5.3	16.7	2.00	2.00	
540.0	6.80	341.52	539.2	19.1	-6.4	20.1	2.00	2.00	
570.0	7.40	341.52	569.0	22.6	-7.6	23.8	2.00	2.00	
600.0	8.00	341.52	598.7	26.4	-8.8	27.9	2.00	2.00	
630.0	8.60	341.52	628.4	30.5	-10.2	32.2	2.00	2.00	
660.0	9.20	341.52	658.0	35.0	-11.7	36.8	2.00	2.00	
669.2	9.38	341.52	667.1	36.4	-12.2	38.3	2.00	2.00	EOB; Inc=9.38°
690.0	9.38	341.52	687.6	39.6	-13.2	41.7	0.00	0.00	
720.0	9.38	341.52	717.2	44.2	-14.8	46.6	0.00	0.00	
750.0	9.38	341.52	746.8	48.9	-16.3	51.5	0.00	0.00	
780.0	9.38	341.52	776.4	53.5	-17.9	56.4	0.00	0.00	
810.0	9.38	341.52	806.0	58.1	-19.4	61.3	0.00	0.00	
840.0	9.38	341.52	835.6	62.8	-21.0	66.2	0.00	0.00	
870.0	9.38	341.52	865.2	67.4	-22.5	71.0	0.00	0.00	
900.0	9.38	341.52	894.8	72.0	-24.1	75.9	0.00	0.00	
930.0	9.38	341.52	924.4	76.7	-25.6	80.8	0.00	0.00	
960.0	9.38	341.52	954.0	81.3	-27.2	85.7	0.00	0.00	
990.0	9.38	341.52	983.6	86.0	-28.7	90.6	0.00	0.00	
1,020.0	9.38	341.52	1,013.2	90.6	-30.3	95.5	0.00	0.00	
1,050.0	9.38	341.52	1,042.8	95.2	-31.8	100.4	0.00	0.00	
1,080.0	9.38	341.52	1,072.4	99.9	-33.4	105.3	0.00	0.00	
1,110.0	9.38	341.52	1,102.0	104.5	-34.9	110.2	0.00	0.00	
1,140.0	9.38	341.52	1,131.6	109.2	-36.5	115.0	0.00	0.00	
1,170.0	9.38	341.52	1,161.2	113.8	-38.0	119.9	0.00	0.00	
1,200.0	9.38	341.52	1,190.8	118.4	-39.6	124.8	0.00	0.00	
1,230.0	9.38	341.52	1,220.4	123.1	-41.1	129.7	0.00	0.00	
1,260.0	9.38	341.52	1,250.0	127.7	-42.7	134.6	0.00	0.00	
1,290.0	9.38	341.52	1,279.6	132.4	-44.2	139.5	0.00	0.00	
1,320.0	9.38	341.52	1,309.2	137.0	-45.8	144.4	0.00	0.00	
1,350.0	9.38	341.52	1,338.8	141.6	-47.3	149.3	0.00	0.00	
1,380.0	9.38	341.52	1,368.4	146.3	-48.9	154.2	0.00	0.00	
1,410.0	9.38	341.52	1,398.0	150.9	-50.4	159.0	0.00	0.00	
1,440.0	9.38	341.52	1,427.6	155.6	-52.0	163.9	0.00	0.00	
1,470.0	9.38	341.52	1,457.2	160.2	-53.5	168.8	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site:	SWSW S32-T5S-R95W (M32 595 Pad)	North Reference:	True
Well:	Milk Cabin OM12D (M32 595 Pad)	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	9.38	341.52	1,486.8	164.8	-55.1	173.7	0.00	0.00	
1,530.0	9.38	341.52	1,516.4	169.5	-56.6	178.6	0.00	0.00	
1,560.0	9.38	341.52	1,546.0	174.1	-58.2	183.5	0.00	0.00	
1,590.0	9.38	341.52	1,575.6	178.7	-59.8	188.4	0.00	0.00	
1,620.0	9.38	341.52	1,605.2	183.4	-61.3	193.3	0.00	0.00	
1,650.0	9.38	341.52	1,634.8	188.0	-62.9	198.2	0.00	0.00	
1,680.0	9.38	341.52	1,664.4	192.7	-64.4	203.0	0.00	0.00	
1,710.0	9.38	341.52	1,694.0	197.3	-66.0	207.9	0.00	0.00	
1,740.0	9.38	341.52	1,723.6	201.9	-67.5	212.8	0.00	0.00	
1,770.0	9.38	341.52	1,753.2	206.6	-69.1	217.7	0.00	0.00	
1,800.0	9.38	341.52	1,782.8	211.2	-70.6	222.6	0.00	0.00	
1,830.0	9.38	341.52	1,812.4	215.9	-72.2	227.5	0.00	0.00	
1,860.0	9.38	341.52	1,842.0	220.5	-73.7	232.4	0.00	0.00	
1,890.0	9.38	341.52	1,871.6	225.1	-75.3	237.3	0.00	0.00	
1,920.0	9.38	341.52	1,901.2	229.8	-76.8	242.2	0.00	0.00	
1,950.0	9.38	341.52	1,930.8	234.4	-78.4	247.0	0.00	0.00	
1,980.0	9.38	341.52	1,960.4	239.1	-79.9	251.9	0.00	0.00	
2,010.0	9.38	341.52	1,990.0	243.7	-81.5	256.8	0.00	0.00	
2,040.0	9.38	341.52	2,019.6	248.3	-83.0	261.7	0.00	0.00	
2,070.0	9.38	341.52	2,049.2	253.0	-84.6	266.6	0.00	0.00	
2,100.0	9.38	341.52	2,078.8	257.6	-86.1	271.5	0.00	0.00	
2,130.0	9.38	341.52	2,108.4	262.2	-87.7	276.4	0.00	0.00	
2,160.0	9.38	341.52	2,138.0	266.9	-89.2	281.3	0.00	0.00	
2,190.0	9.38	341.52	2,167.6	271.5	-90.8	286.2	0.00	0.00	
2,220.0	9.38	341.52	2,197.2	276.2	-92.3	291.0	0.00	0.00	
2,250.0	9.38	341.52	2,226.8	280.8	-93.9	295.9	0.00	0.00	
2,280.0	9.38	341.52	2,256.4	285.4	-95.4	300.8	0.00	0.00	
2,310.0	9.38	341.52	2,285.9	290.1	-97.0	305.7	0.00	0.00	
2,340.0	9.38	341.52	2,315.5	294.7	-98.5	310.6	0.00	0.00	
2,370.0	9.38	341.52	2,345.1	299.4	-100.1	315.5	0.00	0.00	
2,400.0	9.38	341.52	2,374.7	304.0	-101.6	320.4	0.00	0.00	
2,430.0	9.38	341.52	2,404.3	308.6	-103.2	325.3	0.00	0.00	
2,460.0	9.38	341.52	2,433.9	313.3	-104.7	330.2	0.00	0.00	
2,490.0	9.38	341.52	2,463.5	317.9	-106.3	335.0	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									
Milk Cabin OM12D (M32	0.00	0.00	11,259.0	1,192.9	-440.1	1,642,093.38	2,271,466.09	39.567872	-108.084622
- plan misses target center by 8845.2ft at 2490.0ft MD (2463.5 TVD, 317.9 N, -106.3 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
Milk Cabin OM12D (M32	0.00	0.00	8,409.0	1,212.9	-405.5	1,642,112.36	2,271,501.26	39.567927	-108.084499
- plan misses target center by 6019.9ft at 2490.0ft MD (2463.5 TVD, 317.9 N, -106.3 E)									
- Point									

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site:	SWSW S32-T5S-R95W (M32 595 Pad)	North Reference:	True
Well:	Milk Cabin OM12D (M32 595 Pad)	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	9.38	341.52	2,473.4	319.5	-106.8	336.7	0.00	0.00	
2,600.0	9.38	341.52	2,572.1	334.9	-112.0	353.0	0.00	0.00	
2,700.0	9.38	341.52	2,670.7	350.4	-117.1	369.3	0.00	0.00	
2,800.0	9.38	341.52	2,769.4	365.9	-122.3	385.6	0.00	0.00	
2,900.0	9.38	341.52	2,868.1	381.3	-127.5	401.9	0.00	0.00	
3,000.0	9.38	341.52	2,966.7	396.8	-132.6	418.2	0.00	0.00	
3,100.0	9.38	341.52	3,065.4	412.2	-137.8	434.5	0.00	0.00	
3,200.0	9.38	341.52	3,164.0	427.7	-143.0	450.8	0.00	0.00	
3,300.0	9.38	341.52	3,262.7	443.2	-148.1	467.1	0.00	0.00	
3,400.0	9.38	341.52	3,361.4	458.6	-153.3	483.3	0.00	0.00	
3,500.0	9.38	341.52	3,460.0	474.1	-158.5	499.6	0.00	0.00	
3,600.0	9.38	341.52	3,558.7	489.6	-163.7	515.9	0.00	0.00	
3,700.0	9.38	341.52	3,657.3	505.0	-168.8	532.2	0.00	0.00	
3,800.0	9.38	341.52	3,756.0	520.5	-174.0	548.5	0.00	0.00	
3,900.0	9.38	341.52	3,854.7	535.9	-179.2	564.8	0.00	0.00	
3,955.1	9.38	341.52	3,909.0	544.5	-182.0	573.8	0.00	0.00	Wasatch
4,000.0	9.38	341.52	3,953.3	551.4	-184.3	581.1	0.00	0.00	
4,100.0	9.38	341.52	4,052.0	566.9	-189.5	597.4	0.00	0.00	
4,200.0	9.38	341.52	4,150.7	582.3	-194.7	613.7	0.00	0.00	
4,300.0	9.38	341.52	4,249.3	597.8	-199.8	630.0	0.00	0.00	
4,400.0	9.38	341.52	4,348.0	613.3	-205.0	646.3	0.00	0.00	
4,500.0	9.38	341.52	4,446.6	628.7	-210.2	662.6	0.00	0.00	
4,600.0	9.38	341.52	4,545.3	644.2	-215.3	678.9	0.00	0.00	
4,700.0	9.38	341.52	4,644.0	659.7	-220.5	695.2	0.00	0.00	
4,800.0	9.38	341.52	4,742.6	675.1	-225.7	711.5	0.00	0.00	
4,900.0	9.38	341.52	4,841.3	690.6	-230.8	727.8	0.00	0.00	
5,000.0	9.38	341.52	4,940.0	706.0	-236.0	744.1	0.00	0.00	
5,100.0	9.38	341.52	5,038.6	721.5	-241.2	760.4	0.00	0.00	
5,200.0	9.38	341.52	5,137.3	737.0	-246.4	776.7	0.00	0.00	
5,272.7	9.38	341.52	5,209.0	748.2	-250.1	788.5	0.00	0.00	Fort Union
5,300.0	9.38	341.52	5,235.9	752.4	-251.5	793.0	0.00	0.00	
5,400.0	9.38	341.52	5,334.6	767.9	-256.7	809.3	0.00	0.00	
5,500.0	9.38	341.52	5,433.3	783.4	-261.9	825.6	0.00	0.00	
5,600.0	9.38	341.52	5,531.9	798.8	-267.0	841.9	0.00	0.00	
5,700.0	9.38	341.52	5,630.6	814.3	-272.2	858.2	0.00	0.00	
5,779.5	9.38	341.52	5,709.0	826.6	-276.3	871.1	0.00	0.00	Base Ft Union
5,800.0	9.38	341.52	5,729.2	829.8	-277.4	874.5	0.00	0.00	
5,900.0	9.38	341.52	5,827.9	845.2	-282.5	890.8	0.00	0.00	
6,000.0	9.38	341.52	5,926.6	860.7	-287.7	907.1	0.00	0.00	
6,100.0	9.38	341.52	6,025.2	876.1	-292.9	923.4	0.00	0.00	
6,200.0	9.38	341.52	6,123.9	891.6	-298.0	939.7	0.00	0.00	
6,300.0	9.38	341.52	6,222.6	907.1	-303.2	956.0	0.00	0.00	
6,400.0	9.38	341.52	6,321.2	922.5	-308.4	972.2	0.00	0.00	
6,500.0	9.38	341.52	6,419.9	938.0	-313.6	988.5	0.00	0.00	
6,600.0	9.38	341.52	6,518.5	953.5	-318.7	1,004.8	0.00	0.00	
6,700.0	9.38	341.52	6,617.2	968.9	-323.9	1,021.1	0.00	0.00	
6,800.0	9.38	341.52	6,715.9	984.4	-329.1	1,037.4	0.00	0.00	
6,900.0	9.38	341.52	6,814.5	999.8	-334.2	1,053.7	0.00	0.00	
7,000.0	9.38	341.52	6,913.2	1,015.3	-339.4	1,070.0	0.00	0.00	
7,100.0	9.38	341.52	7,011.9	1,030.8	-344.6	1,086.3	0.00	0.00	
7,200.0	9.38	341.52	7,110.5	1,046.2	-349.7	1,102.6	0.00	0.00	
7,300.0	9.38	341.52	7,209.2	1,061.7	-354.9	1,118.9	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site:	SWSW S32-T5S-R95W (M32 595 Pad)	North Reference:	True
Well:	Milk Cabin OM12D (M32 595 Pad)	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
7,400.0	9.38	341.52	7,307.8	1,077.2	-360.1	1,135.2	0.00	0.00	
7,500.0	9.38	341.52	7,406.5	1,092.6	-365.2	1,151.5	0.00	0.00	
7,600.0	9.38	341.52	7,505.2	1,108.1	-370.4	1,167.8	0.00	0.00	
7,700.0	9.38	341.52	7,603.8	1,123.6	-375.6	1,184.1	0.00	0.00	
7,705.2	9.38	341.52	7,609.0	1,124.4	-375.9	1,185.0	0.00	0.00	Ohio Creek
7,800.0	9.38	341.52	7,702.5	1,139.0	-380.8	1,200.4	0.00	0.00	
7,900.0	9.38	341.52	7,801.1	1,154.5	-385.9	1,216.7	0.00	0.00	
8,000.0	9.38	341.52	7,899.8	1,169.9	-391.1	1,233.0	0.00	0.00	
8,042.7	9.38	341.52	7,941.9	1,176.5	-393.3	1,240.0	0.00	0.00	Start Drop -2.00
8,100.0	8.24	341.52	7,998.6	1,184.9	-396.1	1,248.7	2.00	-2.00	
8,110.5	8.03	341.52	8,009.0	1,186.3	-396.6	1,250.2	2.00	-2.00	Williams Fork
8,200.0	6.24	341.52	8,097.8	1,196.8	-400.1	1,261.3	2.00	-2.00	
8,300.0	4.24	341.52	8,197.3	1,205.5	-403.0	1,270.4	2.00	-2.00	
8,400.0	2.24	341.52	8,297.2	1,210.8	-404.8	1,276.1	2.00	-2.00	
8,500.0	0.24	341.52	8,397.1	1,212.9	-405.4	1,278.2	2.00	-2.00	
8,511.9	0.00	0.00	8,409.0	1,212.9	-405.5	1,278.3	2.00	-2.00	EOD; Inc=0° - Approx TOG - Milk Cabin OM12D
8,600.0	0.22	240.01	8,497.1	1,212.8	-405.6	1,278.2	0.25	0.25	
8,700.0	0.47	240.01	8,597.1	1,212.5	-406.1	1,278.1	0.25	0.25	
8,800.0	0.72	240.01	8,697.1	1,212.0	-407.0	1,278.0	0.25	0.25	
8,853.7	0.85	240.01	8,750.9	1,211.6	-407.7	1,277.8	0.25	0.25	
8,900.0	0.85	240.01	8,797.1	1,211.3	-408.3	1,277.7	0.00	0.00	
9,000.0	0.85	240.01	8,897.1	1,210.5	-409.5	1,277.5	0.00	0.00	
9,100.0	0.85	240.01	8,997.1	1,209.8	-410.8	1,277.2	0.00	0.00	
9,200.0	0.85	240.01	9,097.1	1,209.0	-412.1	1,277.0	0.00	0.00	
9,300.0	0.85	240.01	9,197.1	1,208.3	-413.4	1,276.7	0.00	0.00	
9,400.0	0.85	240.01	9,297.1	1,207.6	-414.7	1,276.5	0.00	0.00	
9,500.0	0.85	240.01	9,397.1	1,206.8	-416.0	1,276.2	0.00	0.00	
9,600.0	0.85	240.01	9,497.0	1,206.1	-417.3	1,276.0	0.00	0.00	
9,700.0	0.85	240.01	9,597.0	1,205.3	-418.6	1,275.7	0.00	0.00	
9,800.0	0.85	240.01	9,697.0	1,204.6	-419.9	1,275.4	0.00	0.00	
9,900.0	0.85	240.01	9,797.0	1,203.8	-421.2	1,275.2	0.00	0.00	
10,000.0	0.85	240.01	9,897.0	1,203.1	-422.5	1,274.9	0.00	0.00	
10,100.0	0.85	240.01	9,997.0	1,202.3	-423.8	1,274.7	0.00	0.00	
10,200.0	0.85	240.01	10,097.0	1,201.6	-425.1	1,274.4	0.00	0.00	
10,300.0	0.85	240.01	10,197.0	1,200.8	-426.3	1,274.2	0.00	0.00	
10,400.0	0.85	240.01	10,297.0	1,200.1	-427.6	1,273.9	0.00	0.00	
10,500.0	0.85	240.01	10,396.9	1,199.4	-428.9	1,273.7	0.00	0.00	
10,600.0	0.85	240.01	10,496.9	1,198.6	-430.2	1,273.4	0.00	0.00	
10,700.0	0.85	240.01	10,596.9	1,197.9	-431.5	1,273.2	0.00	0.00	
10,800.0	0.85	240.01	10,696.9	1,197.1	-432.8	1,272.9	0.00	0.00	
10,862.1	0.85	240.01	10,759.0	1,196.7	-433.6	1,272.8	0.00	0.00	Cameo
10,900.0	0.85	240.01	10,796.9	1,196.4	-434.1	1,272.7	0.00	0.00	
11,000.0	0.85	240.01	10,896.9	1,195.6	-435.4	1,272.4	0.00	0.00	
11,100.0	0.85	240.01	10,996.9	1,194.9	-436.7	1,272.2	0.00	0.00	
11,200.0	0.85	240.01	11,096.9	1,194.1	-438.0	1,271.9	0.00	0.00	
11,212.1	0.85	240.01	11,109.0	1,194.0	-438.1	1,271.9	0.00	0.00	Rollins SS
11,300.0	0.85	240.01	11,196.9	1,193.4	-439.3	1,271.7	0.00	0.00	
11,362.1	0.85	240.01	11,259.0	1,192.9	-440.1	1,271.5	0.00	0.00	TD at 11362.1 - Milk Cabin OM12D (M32 595) E

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site:	SWSW S32-T5S-R95W (M32 595 Pad)	North Reference:	True
Well:	Milk Cabin OM12D (M32 595 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Milk Cabin OM12D (M32 - plan hits target center - Rectangle (sides W50.0 H100.0 D0.0)	0.00	0.00	11,259.0	1,192.9	-440.1	1,642,093.38	2,271,466.09	39.567872	-108.084622
Milk Cabin OM12D (M32 - plan hits target center - Point	0.00	0.00	8,409.0	1,212.9	-405.5	1,642,112.36	2,271,501.26	39.567927	-108.084499

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,955.1	3,909.0	Wasatch		0.00		
5,272.7	5,209.0	Fort Union		0.00		
5,779.5	5,709.0	Base Ft Union		0.00		
7,705.2	7,609.0	Ohio Creek		0.00		
8,110.5	8,009.0	Williams Fork		0.00		
8,511.9	8,409.0	Approx TOG		0.00		
10,862.1	10,759.0	Cameo		0.00		
11,212.1	11,109.0	Rollins SS		0.00		

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'	
669.2	667.1	36.4	-12.2	EOB; Inc=9.38°	
8,042.7	7,941.9	1,176.5	-393.3	Start Drop -2.00	
8,511.9	8,409.0	1,212.9	-405.5	EOD; Inc=0°	
11,362.1	11,259.0	1,211.6	-407.7	TD at 11362.1	

Berry Petroleum Company (NAD 83)

Garfield County

SWSW S32-T5S-R95W (M32 595 Pad)

Milk Cabin OM12D (M32 595 Pad)

DD

Plan #1

Anticollision Report

16 June, 2010

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 100.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	6/16/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,439.0	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						
SWSW S32-T5S-R95W (M32 595 Pad)						
Milk Cabin OM11B (M32 595 Pad) - DD - Plan #1	200.0	200.0	20.3	19.7	32.808	CC, ES
Milk Cabin OM11B (M32 595 Pad) - DD - Plan #1	700.0	700.5	42.9	40.0	15.008	SF
Milk Cabin OM11D (M32 595 Pad) - DD - Plan #1	200.0	200.0	30.6	30.0	49.484	CC, ES
Milk Cabin OM11D (M32 595 Pad) - DD - Plan #1	600.0	598.7	55.2	52.9	24.638	SF
Milk Cabin OM12A (M32 595 Pad) - DD - Plan #1	200.0	200.0	10.1	9.5	16.407	CC
Milk Cabin OM12A (M32 595 Pad) - DD - Plan #1	300.0	300.3	10.2	9.3	10.579	ES
Milk Cabin OM12A (M32 595 Pad) - DD - Plan #1	900.0	901.9	19.9	15.5	4.612	SF
Milk Cabin OM12B (M32 595 Pad) - DD - Plan #1	1,072.7	1,068.2	19.2	13.3	3.250	CC
Milk Cabin OM12B (M32 595 Pad) - DD - Plan #1	1,100.0	1,095.4	19.3	13.1	3.094	ES, SF
Milk Cabin OM12C (M32 595 Pad) - DD - Plan #1	200.0	200.0	29.5	28.9	47.712	CC
Milk Cabin OM12C (M32 595 Pad) - DD - Plan #1	400.0	397.9	29.9	28.6	22.722	ES
Milk Cabin OM12C (M32 595 Pad) - DD - Plan #1	1,400.0	1,388.7	82.0	72.8	8.857	SF
Milk Cabin OM13A (M32 595 Pad) - DD - Plan #1	200.0	200.0	9.6	8.9	15.485	CC
Milk Cabin OM13A (M32 595 Pad) - DD - Plan #1	300.0	299.7	9.7	8.7	10.043	ES
Milk Cabin OM13A (M32 595 Pad) - DD - Plan #1	500.0	498.8	13.3	11.6	7.659	SF
Milk Cabin OM13B (M32 595 Pad) - DD - Plan #1	200.0	200.0	41.0	40.4	66.361	CC
Milk Cabin OM13B (M32 595 Pad) - DD - Plan #1	300.0	301.3	41.1	40.1	42.347	ES
Milk Cabin OM13B (M32 595 Pad) - DD - Plan #1	700.0	703.7	54.6	52.0	20.704	SF
Milk Cabin OM13C (M32 595 Pad) - DD - Plan #1	200.0	200.0	60.4	59.8	97.759	CC, ES
Milk Cabin OM13C (M32 595 Pad) - DD - Plan #1	700.0	701.1	89.1	86.5	33.790	SF
Milk Cabin OM13D (M32 595 Pad) - DD - Plan #1	200.0	200.0	70.8	70.2	114.623	CC, ES
Milk Cabin OM13D (M32 595 Pad) - DD - Plan #1	500.0	498.7	86.5	84.8	49.922	SF
Milk Cabin OM14B (M32 595 Pad) - DD - Plan #1	200.0	200.0	50.3	49.6	81.359	CC, ES
Milk Cabin OM14B (M32 595 Pad) - DD - Plan #1	700.0	693.9	98.5	95.7	36.130	SF
Milk Cabin OM14D (M32 595 Pad) - DD - Plan #1	200.0	200.0	81.1	80.5	131.306	CC, ES
Milk Cabin OM14D (M32 595 Pad) - DD - Plan #1	400.0	395.6	92.3	91.0	69.811	SF

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

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM11B (M32 595 Pad) - 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					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)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	142.27	-16.0	12.4	20.3					
100.0	100.0	100.0	100.0	0.1	0.1	142.27	-16.0	12.4	20.3	20.0	0.27	75.415		
200.0	200.0	200.0	200.0	0.3	0.3	142.27	-16.0	12.4	20.3	19.7	0.62	32.808 CC, ES		
300.0	300.0	300.4	300.4	0.5	0.5	158.34	-14.4	13.0	21.0	20.0	0.97	21.589		
400.0	399.8	400.7	400.5	0.7	0.7	152.01	-9.4	14.6	23.2	21.9	1.34	17.287		
500.0	499.5	500.9	500.3	0.9	0.9	143.95	-1.0	17.3	27.4	25.7	1.76	15.568		
600.0	598.7	600.8	599.5	1.2	1.2	136.24	10.6	21.2	34.0	31.7	2.26	15.017		
700.0	697.5	700.5	697.9	1.5	1.5	129.88	25.4	26.0	42.9	40.0	2.86	15.008 SF		
800.0	795.6	799.8	795.4	1.9	1.9	124.99	43.4	32.0	54.2	50.7	3.56	15.236		
900.0	893.1	898.7	891.8	2.3	2.3	121.31	64.5	38.9	67.9	63.5	4.36	15.556		
1,000.0	989.6	997.4	987.6	2.8	2.7	119.73	87.1	46.4	83.6	78.3	5.22	16.023		
1,057.3	1,044.6	1,053.9	1,042.4	3.1	3.0	119.86	100.0	50.6	93.3	87.6	5.71	16.339		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM11D (M32 595 Pad) - 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	141.84	-24.0	18.9	30.6					
100.0	100.0	100.0	100.0	0.1	0.1	141.84	-24.0	18.9	30.6	30.3	0.27	113.749		
200.0	200.0	200.0	200.0	0.3	0.3	141.84	-24.0	18.9	30.6	30.0	0.62	49.484 CC, ES		
300.0	300.0	300.1	300.1	0.5	0.5	158.28	-22.7	20.1	31.9	31.0	0.97	32.891		
400.0	399.8	400.1	399.9	0.7	0.7	153.09	-18.9	23.6	36.3	34.9	1.34	26.957		
500.0	499.5	499.7	499.2	0.9	0.9	146.79	-12.4	29.4	43.9	42.1	1.76	24.935		
600.0	598.7	598.7	597.5	1.2	1.2	140.98	-3.5	37.5	55.2	52.9	2.24	24.638 SF		
700.0	697.5	697.1	694.6	1.5	1.5	136.27	7.8	47.8	70.1	67.3	2.79	25.098		
800.0	795.6	794.5	790.2	1.9	1.8	132.64	21.5	60.1	88.7	85.2	3.43	25.849		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM12A (M32 595 Pad) - 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			
0.0	0.0	0.0	0.0	0.0	0.0	142.28	-8.0	6.2	10.1						
100.0	100.0	100.0	100.0	0.1	0.1	142.28	-8.0	6.2	10.1	9.9	0.27	37.714			
200.0	200.0	200.0	200.0	0.3	0.3	142.28	-8.0	6.2	10.1	9.5	0.62	16.407 CC			
300.0	300.0	300.3	300.3	0.5	0.5	159.32	-6.3	5.9	10.2	9.3	0.97	10.579 ES			
400.0	399.8	400.6	400.5	0.7	0.7	155.18	-1.1	5.1	10.6	9.3	1.33	7.992			
500.0	499.5	500.9	500.4	0.9	0.9	148.96	7.6	3.6	11.3	9.6	1.72	6.600			
600.0	598.7	601.2	599.9	1.2	1.2	141.58	19.7	1.6	12.5	10.4	2.18	5.762			
700.0	697.5	701.5	698.9	1.5	1.5	134.09	35.2	-0.9	14.3	11.6	2.75	5.216			
800.0	795.6	801.7	797.3	1.9	1.9	127.24	54.1	-4.0	16.8	13.3	3.46	4.852			
900.0	893.1	901.9	894.9	2.3	2.3	121.41	76.4	-7.7	19.9	15.5	4.30	4.612 SF			
1,000.0	989.6	1,001.8	991.8	2.8	2.7	120.14	100.5	-11.7	24.1	18.9	5.16	4.672			
1,057.3	1,044.6	1,059.0	1,047.2	3.1	3.0	122.43	114.3	-13.9	27.3	21.8	5.59	4.895			
1,100.0	1,085.4	1,101.6	1,088.6	3.3	3.2	124.52	124.6	-15.6	30.0	24.1	5.88	5.107			
1,200.0	1,180.9	1,201.4	1,185.3	3.8	3.6	128.20	148.7	-19.6	36.4	29.9	6.56	5.551			
1,300.0	1,276.5	1,301.2	1,282.0	4.3	4.1	130.77	172.8	-23.5	42.9	35.7	7.24	5.927			
1,400.0	1,372.0	1,400.9	1,378.8	4.9	4.5	132.67	196.8	-27.5	49.5	41.6	7.92	6.247			
1,500.0	1,467.6	1,500.7	1,475.5	5.4	5.0	134.12	220.9	-31.5	56.1	47.5	8.61	6.521			
1,600.0	1,563.1	1,600.5	1,572.3	6.0	5.4	135.26	245.0	-35.4	62.8	53.5	9.29	6.757			
1,700.0	1,658.7	1,700.3	1,669.0	6.5	5.9	136.18	269.1	-39.4	69.4	59.4	9.97	6.962			
1,800.0	1,754.3	1,800.0	1,765.8	7.0	6.4	136.94	293.1	-43.3	76.1	65.4	10.65	7.142			
1,900.0	1,849.8	1,899.8	1,862.5	7.6	6.8	137.58	317.2	-47.3	82.8	71.4	11.34	7.301			
2,000.0	1,945.4	1,999.6	1,959.2	8.1	7.3	138.13	341.3	-51.3	89.5	77.4	12.02	7.442			
2,100.0	2,040.9	2,099.3	2,056.0	8.7	7.7	138.59	365.4	-55.2	96.2	83.5	12.71	7.569			

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM12B (M32 595 Pad) - 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	-37.74	15.3	-11.8	19.3				
100.0	100.0	100.0	100.0	0.1	0.1	-37.74	15.3	-11.8	19.3	19.1	0.27	71.975	
200.0	200.0	200.0	200.0	0.3	0.3	-37.74	15.3	-11.8	19.3	18.7	0.62	31.311	
300.0	300.0	299.3	299.3	0.5	0.5	-19.77	16.9	-12.6	19.4	18.4	0.97	20.065	
400.0	399.8	398.7	398.5	0.7	0.7	-21.31	21.6	-14.7	19.5	18.2	1.32	14.810	
500.0	499.5	498.0	497.5	0.9	0.9	-23.82	29.4	-18.2	19.8	18.1	1.68	11.766	
600.0	598.7	597.4	596.1	1.2	1.2	-27.21	40.4	-23.2	20.2	18.1	2.07	9.760	
700.0	697.5	696.7	694.2	1.5	1.5	-31.36	54.4	-29.6	20.8	18.3	2.51	8.300	
800.0	795.6	796.0	791.8	1.9	1.8	-36.05	71.6	-37.4	21.7	18.7	3.03	7.151	
900.0	893.1	896.0	889.5	2.3	2.2	-43.50	90.5	-46.0	21.7	17.9	3.74	5.799	
1,000.0	989.6	995.8	987.1	2.8	2.6	-58.60	109.4	-54.6	20.0	15.2	4.84	4.130	
1,057.3	1,044.6	1,052.9	1,043.0	3.1	2.8	-72.34	120.3	-59.5	19.2	13.5	5.67	3.386	
1,072.7	1,059.2	1,068.2	1,057.9	3.1	2.9	-76.59	123.2	-60.8	19.2	13.3	5.89	3.250 CC	
1,100.0	1,085.4	1,095.4	1,084.6	3.3	3.0	-84.10	128.3	-63.2	19.3	13.1	6.25	3.094 ES, SF	
1,200.0	1,180.9	1,195.0	1,181.9	3.8	3.4	-108.17	147.2	-71.7	22.5	15.5	7.03	3.203	
1,300.0	1,276.5	1,294.5	1,279.3	4.3	3.8	-124.25	166.1	-80.3	28.5	21.2	7.30	3.907	
1,400.0	1,372.0	1,394.1	1,376.7	4.9	4.2	-134.26	185.0	-88.9	35.9	28.5	7.47	4.811	
1,500.0	1,467.6	1,493.7	1,474.1	5.4	4.6	-140.73	203.9	-97.5	44.1	36.4	7.68	5.742	
1,600.0	1,563.1	1,593.2	1,571.5	6.0	5.0	-145.14	222.8	-106.0	52.6	44.7	7.93	6.632	
1,700.0	1,658.7	1,692.8	1,668.9	6.5	5.4	-148.31	241.6	-114.6	61.3	53.1	8.22	7.459	
1,800.0	1,754.3	1,792.4	1,766.2	7.0	5.8	-150.69	260.5	-123.2	70.2	61.7	8.54	8.218	
1,900.0	1,849.8	1,892.0	1,863.6	7.6	6.2	-152.53	279.4	-131.8	79.2	70.3	8.89	8.911	
2,000.0	1,945.4	1,991.5	1,961.0	8.1	6.6	-154.00	298.3	-140.3	88.2	79.0	9.25	9.543	
2,100.0	2,040.9	2,091.1	2,058.4	8.7	7.0	-155.19	317.2	-148.9	97.3	87.7	9.62	10.121	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM12C (M32 595 Pad) - 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	-37.74	23.3	-18.0	29.5					
100.0	100.0	100.0	100.0	0.1	0.1	-37.74	23.3	-18.0	29.5	29.2	0.27	109.676		
200.0	200.0	200.0	200.0	0.3	0.3	-37.74	23.3	-18.0	29.5	28.9	0.62	47.712 CC		
300.0	300.0	299.0	299.0	0.5	0.5	-20.42	24.6	-19.1	29.6	28.6	0.97	30.626		
400.0	399.8	397.9	397.8	0.7	0.7	-23.86	28.6	-22.3	29.9	28.6	1.32	22.722 ES		
500.0	499.5	496.9	496.3	0.9	0.9	-29.39	35.3	-27.7	30.7	29.0	1.68	18.275		
600.0	598.7	595.7	594.4	1.2	1.2	-36.56	44.6	-35.1	32.2	30.1	2.08	15.484		
700.0	697.5	694.5	692.0	1.5	1.5	-44.64	56.5	-44.7	34.9	32.3	2.57	13.567		
800.0	795.6	793.1	788.9	1.9	1.8	-52.79	71.0	-56.4	38.9	35.7	3.20	12.169		
900.0	893.1	891.7	885.0	2.3	2.3	-60.29	88.1	-70.1	44.5	40.5	3.99	11.158		
1,000.0	989.6	990.9	981.1	2.8	2.7	-67.48	107.3	-85.5	51.1	46.2	4.94	10.352		
1,057.3	1,044.6	1,047.9	1,036.3	3.1	3.0	-72.26	118.4	-94.4	54.8	49.2	5.56	9.853		
1,100.0	1,085.4	1,090.4	1,077.4	3.3	3.2	-75.87	126.6	-101.1	57.6	51.6	6.04	9.544		
1,200.0	1,180.9	1,189.8	1,173.7	3.8	3.6	-83.00	146.0	-116.7	65.0	57.9	7.14	9.105		
1,300.0	1,276.5	1,289.2	1,270.0	4.3	4.1	-88.61	165.3	-132.2	73.3	65.0	8.22	8.914		
1,400.0	1,372.0	1,388.7	1,366.3	4.9	4.5	-93.06	184.7	-147.8	82.0	72.8	9.26	8.857 SF		
1,500.0	1,467.6	1,488.1	1,462.5	5.4	5.0	-96.63	204.0	-163.3	91.2	80.9	10.28	8.874		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM13A (M32 595 Pad) - 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					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)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-40.41	7.3	-6.2	9.6					
100.0	100.0	100.0	100.0	0.1	0.1	-40.41	7.3	-6.2	9.6	9.3	0.27	35.596		
200.0	200.0	200.0	200.0	0.3	0.3	-40.41	7.3	-6.2	9.6	8.9	0.62	15.485 CC		
300.0	300.0	299.7	299.6	0.5	0.5	-27.34	8.4	-7.5	9.7	8.7	0.97	10.043 ES		
400.0	399.8	399.3	399.1	0.7	0.7	-42.07	11.8	-11.4	10.6	9.3	1.33	8.007		
500.0	499.5	498.8	498.2	0.9	0.9	-60.03	17.4	-18.0	13.3	11.6	1.74	7.659 SF		
600.0	598.7	598.1	596.9	1.2	1.2	-74.40	25.3	-27.1	18.4	16.2	2.25	8.173		
700.0	697.5	697.3	694.8	1.5	1.5	-83.80	35.4	-38.8	25.8	23.0	2.87	8.995		
800.0	795.6	796.5	792.2	1.9	1.8	-90.10	47.5	-52.9	35.2	31.7	3.58	9.834		
900.0	893.1	895.8	889.7	2.3	2.2	-97.33	60.0	-67.4	45.5	41.1	4.38	10.400		
1,000.0	989.6	994.9	986.9	2.8	2.6	-105.19	72.5	-81.9	57.1	51.9	5.21	10.965		
1,057.3	1,044.6	1,051.5	1,042.4	3.1	2.8	-109.65	79.7	-90.2	64.6	58.9	5.67	11.387		
1,100.0	1,085.4	1,093.6	1,083.7	3.3	2.9	-112.75	85.0	-96.3	70.6	64.6	6.01	11.748		
1,200.0	1,180.9	1,192.2	1,180.5	3.8	3.3	-118.28	97.4	-110.8	85.2	78.4	6.76	12.595		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM13B (M32 595 Pad) - 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	142.27	-32.4	25.1	41.0					
100.0	100.0	100.0	100.0	0.1	0.1	142.27	-32.4	25.1	41.0	40.7	0.27	152.544		
200.0	200.0	200.0	200.0	0.3	0.3	142.27	-32.4	25.1	41.0	40.4	0.62	66.361 CC		
300.0	300.0	301.3	301.3	0.5	0.5	162.66	-31.6	23.5	41.1	40.1	0.97	42.347 ES		
400.0	399.8	402.5	402.3	0.7	0.7	168.31	-29.3	18.7	41.6	40.3	1.33	31.318		
500.0	499.5	503.4	502.8	0.9	0.9	177.22	-25.3	10.7	43.3	41.6	1.71	25.395		
600.0	598.7	604.0	602.7	1.2	1.2	-171.82	-19.9	-0.4	47.2	45.1	2.13	22.148		
700.0	697.5	703.7	701.2	1.5	1.5	-161.22	-13.2	-14.0	54.6	52.0	2.64	20.704 SF		
800.0	795.6	802.8	799.1	1.9	1.8	-154.38	-6.4	-27.8	66.4	63.2	3.19	20.804		
900.0	893.1	901.5	896.6	2.3	2.1	-150.79	0.3	-41.6	81.8	78.0	3.77	21.700		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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												SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM13C (M32 595 Pad) - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning				
0.0	0.0	0.0	0.0	0.0	0.0	141.63	-47.4	37.5	60.4								
100.0	100.0	100.0	100.0	0.1	0.1	141.63	-47.4	37.5	60.4	60.1	0.27	224.719					
200.0	200.0	200.0	200.0	0.3	0.3	141.63	-47.4	37.5	60.4	59.8	0.62	97.759	CC, ES				
300.0	300.0	301.3	301.3	0.5	0.5	161.99	-47.4	35.7	61.0	60.0	0.97	62.739					
400.0	399.8	402.3	402.1	0.7	0.7	167.37	-47.3	30.4	63.1	61.7	1.34	47.102					
500.0	499.5	502.8	502.3	0.9	0.9	175.42	-47.3	21.5	67.7	65.9	1.73	39.031					
600.0	598.7	602.6	601.2	1.2	1.2	-175.28	-47.3	9.3	76.0	73.8	2.17	34.965					
700.0	697.5	701.1	698.8	1.5	1.5	-167.43	-47.3	-4.4	89.1	86.5	2.64	33.790	SF				

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM13D (M32 595 Pad) - 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					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)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	141.90	-55.7	43.7	70.8					
100.0	100.0	100.0	100.0	0.1	0.1	141.90	-55.7	43.7	70.8	70.6	0.27	263.484		
200.0	200.0	200.0	200.0	0.3	0.3	141.90	-55.7	43.7	70.8	70.2	0.62	114.623 CC, ES		
300.0	300.0	300.2	300.2	0.5	0.5	162.22	-56.7	42.2	72.3	71.3	0.97	74.472		
400.0	399.8	399.9	399.7	0.7	0.7	167.25	-59.4	37.8	77.2	75.9	1.34	57.625		
500.0	499.5	498.7	498.2	0.9	0.9	174.22	-64.0	30.5	86.5	84.8	1.73	49.922 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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												SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM14B (M32 595 Pad) - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning				
0.0	0.0	0.0	0.0	0.0	0.0	141.50	-39.3	31.3	50.3								
100.0	100.0	100.0	100.0	0.1	0.1	141.50	-39.3	31.3	50.3	50.0	0.27	187.021					
200.0	200.0	200.0	200.0	0.3	0.3	141.50	-39.3	31.3	50.3	49.6	0.62	81.359	CC, ES				
300.0	300.0	299.8	299.8	0.5	0.5	158.72	-38.4	32.7	52.1	51.1	0.97	53.629					
400.0	399.8	399.4	399.2	0.7	0.7	155.40	-35.4	37.0	57.5	56.2	1.34	42.870					
500.0	499.5	498.4	497.9	0.9	0.9	151.09	-30.6	44.1	67.0	65.2	1.75	38.296					
600.0	598.7	596.7	595.4	1.2	1.2	146.78	-23.9	54.0	80.6	78.4	2.21	36.531					
700.0	697.5	693.9	691.5	1.5	1.5	142.97	-15.5	66.4	98.5	95.7	2.73	36.130	SF				

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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													SWSW S32-T5S-R95W (M32 595 Pad) - Milk Cabin OM14D (M32 595 Pad) - 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 Axis	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
0.0	0.0	0.0	0.0	0.0	0.0	141.79	-63.7	50.2	81.1									
100.0	100.0	100.0	100.0	0.1	0.1	141.79	-63.7	50.2	81.1	80.9	0.27	301.832						
200.0	200.0	200.0	200.0	0.3	0.3	141.79	-63.7	50.2	81.1	80.5	0.62	131.306 CC, ES						
300.0	300.0	298.0	298.0	0.5	0.5	159.80	-63.9	51.9	83.9	83.0	0.97	86.907						
400.0	399.8	395.6	395.5	0.7	0.7	158.55	-64.2	56.8	92.3	91.0	1.32	69.811 SF						

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM12D (M32 595 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8144.0ft (Original Well Elev)
Reference Site:	SWSW S32-T5S-R95W (M32 595 Pad)	MD Reference:	KBE @ 8144.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Milk Cabin OM12D (M32 595 Pad)	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 KBE @ 8144.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Milk Cabin OM12D (M32 595 Pad)
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.63°

