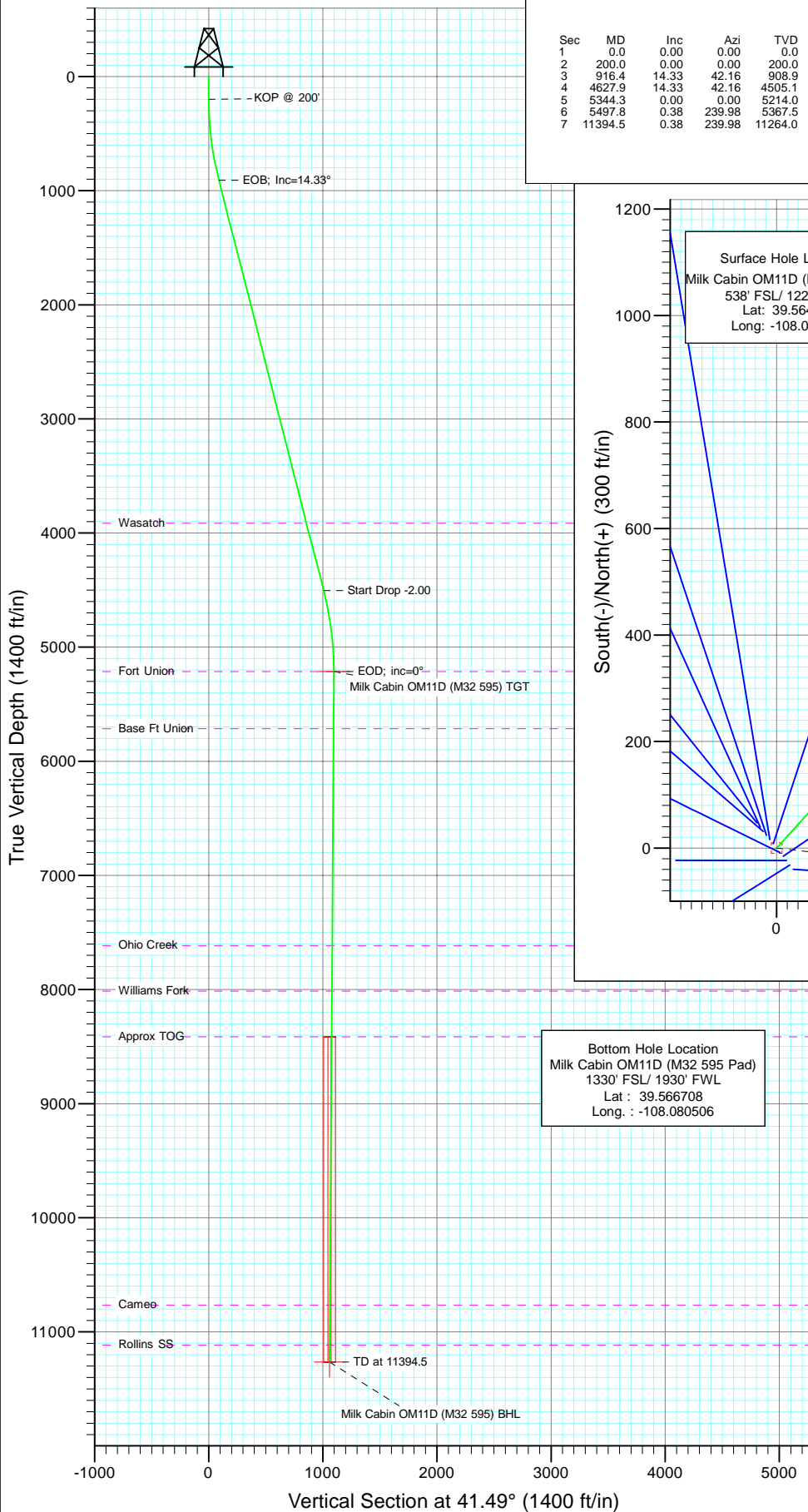
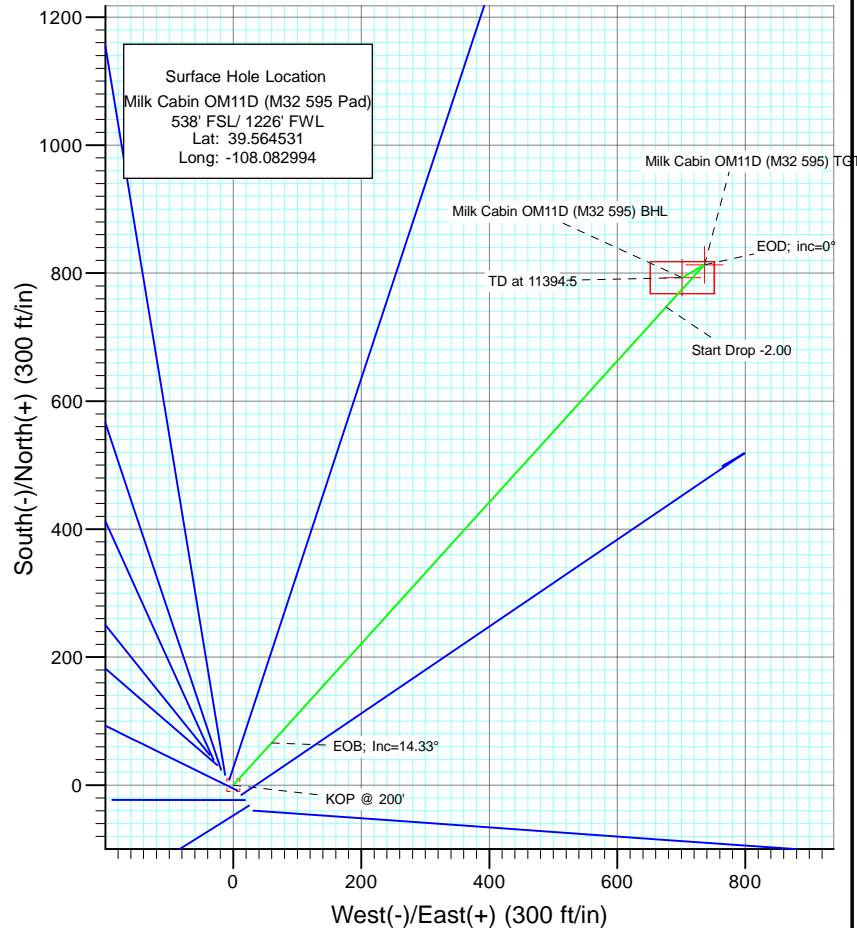




Project: Garfield County
Site: SWSW S32-T5S-R95W (M32 595 Pad)
Well: Milk Cabin OM11D (M32 595 Pad)
Wellbore: DD
Design: Plan #1



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	916.4	14.33	42.16	908.9	66.1	59.8	2.00	42.16	89.1	
4	4627.9	14.33	42.16	4505.1	746.9	676.2	0.00	0.00	1007.5	
5	5344.3	0.00	0.00	5214.0	813.0	736.0	2.00	180.00	1096.6	Milk Cabin OM11D (M32 595) TGT
6	5497.8	0.38	239.98	5367.5	812.7	735.6	0.25	239.98	1096.1	
7	11394.5	0.38	239.98	11264.0	793.0	701.4	0.00	0.00	1058.7	Milk Cabin OM11D (M32 595) BHL



Bottom Hole Location
Milk Cabin OM11D (M32 595 Pad)
1330' FSL/ 1930' FWL
Lat : 39.566708
Long. : -108.080506



Azimuths to True North
Magnetic North: 10.53°

Magnetic Field
Strength: 52359.3snT
Dip Angle: 65.81°
Date: 6/16/2010
Model: IGRF2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3914.0	4017.9	Wasatch
5214.0	5344.3	Fort Union
5714.0	5844.3	Base Ft Union
7614.0	7744.4	Ohio Creek
8014.0	8144.4	Williams Fork
8414.0	8544.4	Approx TOG
10764.0	10894.4	Cameo
11114.0	11244.5	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 OM11D (M32 595) BHL	49	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 OM11D (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 OM11D (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 OM11D (M32 595 Pad)					
Well Position	+N/-S	0.0 ft	Northing:	1,640,863.86 ft	Latitude:	39.564531
	+E/-W	0.0 ft	Easting:	2,271,890.27 ft	Longitude:	-108.082994
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	41.49

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	
916.4	14.33	42.16	908.9	66.1	59.8	2.00	2.00	0.00	42.16	
4,627.9	14.33	42.16	4,505.1	746.9	676.2	0.00	0.00	0.00	0.00	
5,344.3	0.00	0.00	5,214.0	813.0	736.0	2.00	-2.00	0.00	180.00	Milk Cabin OM11D (N
5,497.8	0.38	239.98	5,367.5	812.7	735.6	0.25	0.25	-78.19	239.98	
11,394.5	0.38	239.98	11,264.0	793.0	701.4	0.00	0.00	0.00	0.00	Milk Cabin OM11D (N

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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	42.16	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	42.16	240.0	0.2	0.2	0.3	2.00	2.00	
270.0	1.40	42.16	270.0	0.6	0.6	0.9	2.00	2.00	
300.0	2.00	42.16	300.0	1.3	1.2	1.7	2.00	2.00	
330.0	2.60	42.16	330.0	2.2	2.0	2.9	2.00	2.00	
360.0	3.20	42.16	359.9	3.3	3.0	4.5	2.00	2.00	
390.0	3.80	42.16	389.9	4.7	4.2	6.3	2.00	2.00	
420.0	4.40	42.16	419.8	6.3	5.7	8.4	2.00	2.00	
450.0	5.00	42.16	449.7	8.1	7.3	10.9	2.00	2.00	
480.0	5.60	42.16	479.6	10.1	9.2	13.7	2.00	2.00	
510.0	6.20	42.16	509.4	12.4	11.2	16.8	2.00	2.00	
540.0	6.80	42.16	539.2	14.9	13.5	20.2	2.00	2.00	
570.0	7.40	42.16	569.0	17.7	16.0	23.9	2.00	2.00	
600.0	8.00	42.16	598.7	20.7	18.7	27.9	2.00	2.00	
630.0	8.60	42.16	628.4	23.9	21.6	32.2	2.00	2.00	
660.0	9.20	42.16	658.0	27.3	24.7	36.8	2.00	2.00	
690.0	9.80	42.16	687.6	31.0	28.1	41.8	2.00	2.00	
720.0	10.40	42.16	717.1	34.9	31.6	47.1	2.00	2.00	
750.0	11.00	42.16	746.6	39.0	35.3	52.6	2.00	2.00	
780.0	11.60	42.16	776.0	43.4	39.3	58.5	2.00	2.00	
810.0	12.20	42.16	805.4	48.0	43.4	64.7	2.00	2.00	
840.0	12.80	42.16	834.7	52.8	47.8	71.2	2.00	2.00	
870.0	13.40	42.16	863.9	57.8	52.3	78.0	2.00	2.00	
900.0	14.00	42.16	893.1	63.1	57.1	85.1	2.00	2.00	
916.4	14.33	42.16	908.9	66.1	59.8	89.1	2.00	2.00	EOB; Inc=14.33°
930.0	14.33	42.16	922.1	68.6	62.1	92.5	0.00	0.00	
960.0	14.33	42.16	951.2	74.1	67.0	99.9	0.00	0.00	
990.0	14.33	42.16	980.3	79.6	72.0	107.3	0.00	0.00	
1,020.0	14.33	42.16	1,009.3	85.1	77.0	114.7	0.00	0.00	
1,050.0	14.33	42.16	1,038.4	90.6	82.0	122.2	0.00	0.00	
1,080.0	14.33	42.16	1,067.5	96.1	87.0	129.6	0.00	0.00	
1,110.0	14.33	42.16	1,096.5	101.6	92.0	137.0	0.00	0.00	
1,140.0	14.33	42.16	1,125.6	107.1	96.9	144.4	0.00	0.00	
1,170.0	14.33	42.16	1,154.7	112.6	101.9	151.9	0.00	0.00	
1,200.0	14.33	42.16	1,183.7	118.1	106.9	159.3	0.00	0.00	
1,230.0	14.33	42.16	1,212.8	123.6	111.9	166.7	0.00	0.00	
1,260.0	14.33	42.16	1,241.9	129.1	116.9	174.1	0.00	0.00	
1,290.0	14.33	42.16	1,270.9	134.6	121.9	181.6	0.00	0.00	
1,320.0	14.33	42.16	1,300.0	140.1	126.8	189.0	0.00	0.00	
1,350.0	14.33	42.16	1,329.1	145.6	131.8	196.4	0.00	0.00	
1,380.0	14.33	42.16	1,358.1	151.1	136.8	203.8	0.00	0.00	
1,410.0	14.33	42.16	1,387.2	156.6	141.8	211.2	0.00	0.00	
1,440.0	14.33	42.16	1,416.3	162.1	146.8	218.7	0.00	0.00	
1,470.0	14.33	42.16	1,445.3	167.6	151.8	226.1	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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	14.33	42.16	1,474.4	173.1	156.7	233.5	0.00	0.00	
1,530.0	14.33	42.16	1,503.5	178.6	161.7	240.9	0.00	0.00	
1,560.0	14.33	42.16	1,532.5	184.1	166.7	248.4	0.00	0.00	
1,590.0	14.33	42.16	1,561.6	189.6	171.7	255.8	0.00	0.00	
1,620.0	14.33	42.16	1,590.7	195.1	176.7	263.2	0.00	0.00	
1,650.0	14.33	42.16	1,619.7	200.6	181.6	270.6	0.00	0.00	
1,680.0	14.33	42.16	1,648.8	206.1	186.6	278.1	0.00	0.00	
1,710.0	14.33	42.16	1,677.9	211.6	191.6	285.5	0.00	0.00	
1,740.0	14.33	42.16	1,706.9	217.1	196.6	292.9	0.00	0.00	
1,770.0	14.33	42.16	1,736.0	222.7	201.6	300.3	0.00	0.00	
1,800.0	14.33	42.16	1,765.1	228.2	206.6	307.7	0.00	0.00	
1,830.0	14.33	42.16	1,794.1	233.7	211.5	315.2	0.00	0.00	
1,860.0	14.33	42.16	1,823.2	239.2	216.5	322.6	0.00	0.00	
1,890.0	14.33	42.16	1,852.3	244.7	221.5	330.0	0.00	0.00	
1,920.0	14.33	42.16	1,881.3	250.2	226.5	337.4	0.00	0.00	
1,950.0	14.33	42.16	1,910.4	255.7	231.5	344.9	0.00	0.00	
1,980.0	14.33	42.16	1,939.5	261.2	236.5	352.3	0.00	0.00	
2,010.0	14.33	42.16	1,968.5	266.7	241.4	359.7	0.00	0.00	
2,040.0	14.33	42.16	1,997.6	272.2	246.4	367.1	0.00	0.00	
2,070.0	14.33	42.16	2,026.7	277.7	251.4	374.6	0.00	0.00	
2,100.0	14.33	42.16	2,055.7	283.2	256.4	382.0	0.00	0.00	
2,130.0	14.33	42.16	2,084.8	288.7	261.4	389.4	0.00	0.00	
2,160.0	14.33	42.16	2,113.9	294.2	266.4	396.8	0.00	0.00	
2,190.0	14.33	42.16	2,142.9	299.7	271.3	404.3	0.00	0.00	
2,220.0	14.33	42.16	2,172.0	305.2	276.3	411.7	0.00	0.00	
2,250.0	14.33	42.16	2,201.1	310.7	281.3	419.1	0.00	0.00	
2,280.0	14.33	42.16	2,230.1	316.2	286.3	426.5	0.00	0.00	
2,310.0	14.33	42.16	2,259.2	321.7	291.3	433.9	0.00	0.00	
2,340.0	14.33	42.16	2,288.3	327.2	296.2	441.4	0.00	0.00	
2,370.0	14.33	42.16	2,317.3	332.7	301.2	448.8	0.00	0.00	
2,400.0	14.33	42.16	2,346.4	338.2	306.2	456.2	0.00	0.00	
2,430.0	14.33	42.16	2,375.5	343.7	311.2	463.6	0.00	0.00	
2,460.0	14.33	42.16	2,404.5	349.2	316.2	471.1	0.00	0.00	
2,490.0	14.33	42.16	2,433.6	354.7	321.2	478.5	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 OM11D (M32	0.00	0.00	11,264.0	793.0	701.4	1,641,636.59	2,272,613.94	39.566708	-108.080506
- plan misses target center by 8849.4ft at 2490.0ft MD (2433.6 TVD, 354.7 N, 321.2 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
Milk Cabin OM11D (M32	0.00	0.00	5,214.0	813.0	736.0	1,641,655.61	2,272,649.13	39.566763	-108.080383
- plan misses target center by 2848.3ft at 2490.0ft MD (2433.6 TVD, 354.7 N, 321.2 E)									
- Point									

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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	14.33	42.16	2,443.3	356.6	322.8	481.0	0.00	0.00	
2,600.0	14.33	42.16	2,540.2	374.9	339.4	505.7	0.00	0.00	
2,700.0	14.33	42.16	2,637.1	393.3	356.0	530.5	0.00	0.00	
2,800.0	14.33	42.16	2,734.0	411.6	372.6	555.2	0.00	0.00	
2,900.0	14.33	42.16	2,830.9	430.0	389.3	579.9	0.00	0.00	
3,000.0	14.33	42.16	2,927.7	448.3	405.9	604.7	0.00	0.00	
3,100.0	14.33	42.16	3,024.6	466.6	422.5	629.4	0.00	0.00	
3,200.0	14.33	42.16	3,121.5	485.0	439.1	654.2	0.00	0.00	
3,300.0	14.33	42.16	3,218.4	503.3	455.7	678.9	0.00	0.00	
3,400.0	14.33	42.16	3,315.3	521.7	472.3	703.7	0.00	0.00	
3,500.0	14.33	42.16	3,412.2	540.0	488.9	728.4	0.00	0.00	
3,600.0	14.33	42.16	3,509.1	558.4	505.5	753.2	0.00	0.00	
3,700.0	14.33	42.16	3,606.0	576.7	522.1	777.9	0.00	0.00	
3,800.0	14.33	42.16	3,702.9	595.1	538.7	802.6	0.00	0.00	
3,900.0	14.33	42.16	3,799.8	613.4	555.3	827.4	0.00	0.00	
4,000.0	14.33	42.16	3,896.6	631.7	572.0	852.1	0.00	0.00	
4,017.9	14.33	42.16	3,914.0	635.0	574.9	856.6	0.00	0.00	Wasatch
4,100.0	14.33	42.16	3,993.5	650.1	588.6	876.9	0.00	0.00	
4,200.0	14.33	42.16	4,090.4	668.4	605.2	901.6	0.00	0.00	
4,300.0	14.33	42.16	4,187.3	686.8	621.8	926.4	0.00	0.00	
4,400.0	14.33	42.16	4,284.2	705.1	638.4	951.1	0.00	0.00	
4,500.0	14.33	42.16	4,381.1	723.5	655.0	975.9	0.00	0.00	
4,600.0	14.33	42.16	4,478.0	741.8	671.6	1,000.6	0.00	0.00	
4,627.9	14.33	42.16	4,505.1	746.9	676.2	1,007.5	0.00	0.00	Start Drop -2.00
4,700.0	12.89	42.16	4,575.1	759.5	687.6	1,024.5	2.00	-2.00	
4,800.0	10.89	42.16	4,672.9	774.8	701.4	1,045.1	2.00	-2.00	
4,900.0	8.89	42.16	4,771.5	787.5	713.0	1,062.2	2.00	-2.00	
5,000.0	6.89	42.16	4,870.5	797.7	722.2	1,076.0	2.00	-2.00	
5,100.0	4.89	42.16	4,970.0	805.3	729.1	1,086.2	2.00	-2.00	
5,200.0	2.89	42.16	5,069.7	810.3	733.6	1,093.0	2.00	-2.00	
5,300.0	0.89	42.16	5,169.7	812.7	735.8	1,096.3	2.00	-2.00	
5,344.3	0.00	0.00	5,214.0	813.0	736.0	1,096.6	2.00	-2.00	EOD; inc=0° - Fort Union - Milk Cabin OM11D (
5,400.0	0.14	239.98	5,269.7	813.0	736.0	1,096.6	0.25	0.25	
5,497.8	0.38	239.98	5,367.5	812.7	735.6	1,096.1	0.25	0.25	
5,500.0	0.38	239.98	5,369.7	812.7	735.6	1,096.1	0.00	0.00	
5,600.0	0.38	239.98	5,469.7	812.4	735.0	1,095.5	0.00	0.00	
5,700.0	0.38	239.98	5,569.7	812.1	734.4	1,094.8	0.00	0.00	
5,800.0	0.38	239.98	5,669.7	811.7	733.9	1,094.2	0.00	0.00	
5,844.3	0.38	239.98	5,714.0	811.6	733.6	1,093.9	0.00	0.00	Base Ft Union
5,900.0	0.38	239.98	5,769.7	811.4	733.3	1,093.6	0.00	0.00	
6,000.0	0.38	239.98	5,869.7	811.1	732.7	1,092.9	0.00	0.00	
6,100.0	0.38	239.98	5,969.7	810.7	732.1	1,092.3	0.00	0.00	
6,200.0	0.38	239.98	6,069.7	810.4	731.5	1,091.7	0.00	0.00	
6,300.0	0.38	239.98	6,169.7	810.1	731.0	1,091.0	0.00	0.00	
6,400.0	0.38	239.98	6,269.7	809.7	730.4	1,090.4	0.00	0.00	
6,500.0	0.38	239.98	6,369.6	809.4	729.8	1,089.8	0.00	0.00	
6,600.0	0.38	239.98	6,469.6	809.1	729.2	1,089.1	0.00	0.00	
6,700.0	0.38	239.98	6,569.6	808.7	728.6	1,088.5	0.00	0.00	
6,800.0	0.38	239.98	6,669.6	808.4	728.1	1,087.9	0.00	0.00	
6,900.0	0.38	239.98	6,769.6	808.0	727.5	1,087.2	0.00	0.00	
7,000.0	0.38	239.98	6,869.6	807.7	726.9	1,086.6	0.00	0.00	
7,100.0	0.38	239.98	6,969.6	807.4	726.3	1,086.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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
7,200.0	0.38	239.98	7,069.6	807.0	725.7	1,085.3	0.00	0.00	
7,300.0	0.38	239.98	7,169.6	806.7	725.2	1,084.7	0.00	0.00	
7,400.0	0.38	239.98	7,269.6	806.4	724.6	1,084.1	0.00	0.00	
7,500.0	0.38	239.98	7,369.6	806.0	724.0	1,083.4	0.00	0.00	
7,600.0	0.38	239.98	7,469.6	805.7	723.4	1,082.8	0.00	0.00	
7,700.0	0.38	239.98	7,569.6	805.4	722.8	1,082.1	0.00	0.00	
7,744.4	0.38	239.98	7,614.0	805.2	722.6	1,081.9	0.00	0.00	Ohio Creek
7,800.0	0.38	239.98	7,669.6	805.0	722.3	1,081.5	0.00	0.00	
7,900.0	0.38	239.98	7,769.6	804.7	721.7	1,080.9	0.00	0.00	
8,000.0	0.38	239.98	7,869.6	804.4	721.1	1,080.2	0.00	0.00	
8,100.0	0.38	239.98	7,969.6	804.0	720.5	1,079.6	0.00	0.00	
8,144.4	0.38	239.98	8,014.0	803.9	720.3	1,079.3	0.00	0.00	Williams Fork
8,200.0	0.38	239.98	8,069.6	803.7	719.9	1,079.0	0.00	0.00	
8,300.0	0.38	239.98	8,169.6	803.4	719.4	1,078.3	0.00	0.00	
8,400.0	0.38	239.98	8,269.6	803.0	718.8	1,077.7	0.00	0.00	
8,500.0	0.38	239.98	8,369.6	802.7	718.2	1,077.1	0.00	0.00	
8,544.4	0.38	239.98	8,414.0	802.5	717.9	1,076.8	0.00	0.00	Approx TOG
8,600.0	0.38	239.98	8,469.6	802.3	717.6	1,076.4	0.00	0.00	
8,700.0	0.38	239.98	8,569.6	802.0	717.0	1,075.8	0.00	0.00	
8,800.0	0.38	239.98	8,669.6	801.7	716.5	1,075.2	0.00	0.00	
8,900.0	0.38	239.98	8,769.6	801.3	715.9	1,074.5	0.00	0.00	
9,000.0	0.38	239.98	8,869.6	801.0	715.3	1,073.9	0.00	0.00	
9,100.0	0.38	239.98	8,969.6	800.7	714.7	1,073.3	0.00	0.00	
9,200.0	0.38	239.98	9,069.6	800.3	714.1	1,072.6	0.00	0.00	
9,300.0	0.38	239.98	9,169.6	800.0	713.6	1,072.0	0.00	0.00	
9,400.0	0.38	239.98	9,269.6	799.7	713.0	1,071.3	0.00	0.00	
9,500.0	0.38	239.98	9,369.6	799.3	712.4	1,070.7	0.00	0.00	
9,600.0	0.38	239.98	9,469.6	799.0	711.8	1,070.1	0.00	0.00	
9,700.0	0.38	239.98	9,569.6	798.7	711.2	1,069.4	0.00	0.00	
9,800.0	0.38	239.98	9,669.6	798.3	710.7	1,068.8	0.00	0.00	
9,900.0	0.38	239.98	9,769.6	798.0	710.1	1,068.2	0.00	0.00	
10,000.0	0.38	239.98	9,869.6	797.7	709.5	1,067.5	0.00	0.00	
10,100.0	0.38	239.98	9,969.6	797.3	708.9	1,066.9	0.00	0.00	
10,200.0	0.38	239.98	10,069.6	797.0	708.3	1,066.3	0.00	0.00	
10,300.0	0.38	239.98	10,169.6	796.7	707.8	1,065.6	0.00	0.00	
10,400.0	0.38	239.98	10,269.6	796.3	707.2	1,065.0	0.00	0.00	
10,500.0	0.38	239.98	10,369.6	796.0	706.6	1,064.4	0.00	0.00	
10,600.0	0.38	239.98	10,469.6	795.6	706.0	1,063.7	0.00	0.00	
10,700.0	0.38	239.98	10,569.6	795.3	705.4	1,063.1	0.00	0.00	
10,800.0	0.38	239.98	10,669.6	795.0	704.9	1,062.5	0.00	0.00	
10,894.4	0.38	239.98	10,764.0	794.7	704.3	1,061.9	0.00	0.00	Cameo
10,900.0	0.38	239.98	10,769.6	794.6	704.3	1,061.8	0.00	0.00	
11,000.0	0.38	239.98	10,869.5	794.3	703.7	1,061.2	0.00	0.00	
11,100.0	0.38	239.98	10,969.5	794.0	703.1	1,060.6	0.00	0.00	
11,200.0	0.38	239.98	11,069.5	793.6	702.5	1,059.9	0.00	0.00	
11,244.5	0.38	239.98	11,114.0	793.5	702.3	1,059.6	0.00	0.00	Rollins SS
11,300.0	0.38	239.98	11,169.5	793.3	702.0	1,059.3	0.00	0.00	
11,394.5	0.38	239.98	11,264.0	793.0	701.4	1,058.7	0.00	0.00	Milk Cabin OM11D (M32 595) BHL

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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 OM11D (M32 - plan hits target center - Rectangle (sides W50.0 H100.0 D0.0)	0.00	0.00	11,264.0	793.0	701.4	1,641,636.59	2,272,613.94	39.566708	-108.080506
Milk Cabin OM11D (M32 - plan hits target center - Point	0.00	0.00	5,214.0	813.0	736.0	1,641,655.61	2,272,649.13	39.566763	-108.080383

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,017.9	3,914.0	Wasatch		0.00		
5,344.3	5,214.0	Fort Union		0.00		
5,844.3	5,714.0	Base Ft Union		0.00		
7,744.4	7,614.0	Ohio Creek		0.00		
8,144.4	8,014.0	Williams Fork		0.00		
8,544.4	8,414.0	Approx TOG		0.00		
10,894.4	10,764.0	Cameo		0.00		
11,244.5	11,114.0	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'	
916.4	908.9	66.1	59.8	EOB; Inc=14.33°	
4,627.9	4,505.1	746.9	676.2	Start Drop -2.00	
5,344.3	5,214.0	813.0	736.0	EOD; inc=0°	
11,394.5	11,264.0	793.0	701.4	TD at 11394.5	

Berry Petroleum Company (NAD 83)

Garfield County

SWSW S32-T5S-R95W (M32 595 Pad)

Milk Cabin OM11D (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 OM11D (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 OM11D (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	11,394.5	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	10.3	9.7	16.679	CC, ES
Milk Cabin OM11B (M32 595 Pad) - DD - Plan #1	500.0	499.3	16.5	14.7	9.166	SF
Milk Cabin OM12A (M32 595 Pad) - DD - Plan #1	200.0	200.0	20.4	19.8	33.078	CC, ES
Milk Cabin OM12A (M32 595 Pad) - DD - Plan #1	500.0	497.5	32.4	30.7	18.305	SF
Milk Cabin OM12B (M32 595 Pad) - DD - Plan #1	200.0	200.0	49.9	49.3	80.794	CC, ES
Milk Cabin OM12B (M32 595 Pad) - DD - Plan #1	700.0	687.3	89.9	87.2	32.820	SF
Milk Cabin OM12C (M32 595 Pad) - DD - Plan #1	200.0	200.0	60.1	59.4	97.195	CC, ES
Milk Cabin OM12C (M32 595 Pad) - DD - Plan #1	600.0	588.7	86.9	84.8	39.960	SF
Milk Cabin OM12D (M32 595 Pad) - DD - Plan #1	200.0	200.0	30.6	30.0	49.484	CC, ES
Milk Cabin OM12D (M32 595 Pad) - DD - Plan #1	600.0	594.1	54.9	52.6	24.544	SF
Milk Cabin OM13A (M32 595 Pad) - DD - Plan #1	200.0	200.0	40.1	39.5	64.960	CC, ES
Milk Cabin OM13A (M32 595 Pad) - DD - Plan #1	500.0	494.3	55.9	54.1	32.267	SF
Milk Cabin OM13B (M32 595 Pad) - DD - Plan #1	327.3	327.5	9.4	8.3	8.747	CC, ES
Milk Cabin OM13B (M32 595 Pad) - DD - Plan #1	400.0	400.0	11.5	10.2	8.575	SF
Milk Cabin OM13C (M32 595 Pad) - DD - Plan #1	354.0	354.6	28.8	27.7	24.414	CC, ES
Milk Cabin OM13C (M32 595 Pad) - DD - Plan #1	500.0	499.2	35.7	34.0	20.385	SF
Milk Cabin OM13D (M32 595 Pad) - DD - Plan #1	200.0	200.0	40.2	39.6	65.139	CC
Milk Cabin OM13D (M32 595 Pad) - DD - Plan #1	300.0	300.0	40.5	39.5	41.578	ES
Milk Cabin OM13D (M32 595 Pad) - DD - Plan #1	500.0	497.2	51.6	49.9	29.464	SF
Milk Cabin OM14B (M32 595 Pad) - DD - Plan #1	200.0	200.0	19.7	19.1	31.878	CC, ES
Milk Cabin OM14B (M32 595 Pad) - DD - Plan #1	1,600.0	1,597.6	82.8	72.7	8.223	SF
Milk Cabin OM14D (M32 595 Pad) - DD - Plan #1	200.0	200.0	50.6	49.9	81.822	CC, ES
Milk Cabin OM14D (M32 595 Pad) - DD - Plan #1	700.0	691.3	87.3	84.5	30.732	SF

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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	-38.99	8.0	-6.5	10.3					
100.0	100.0	100.0	100.0	0.1	0.1	-38.99	8.0	-6.5	10.3	10.0	0.27	38.340		
200.0	200.0	200.0	200.0	0.3	0.3	-38.99	8.0	-6.5	10.3	9.7	0.62	16.679 CC, ES		
300.0	300.0	299.8	299.8	0.5	0.5	-82.49	9.7	-5.9	11.0	10.0	0.97	11.286		
400.0	399.8	399.6	399.4	0.7	0.7	-85.66	14.6	-4.3	13.0	11.7	1.36	9.595		
500.0	499.5	499.3	498.7	0.9	0.9	-89.16	22.8	-1.6	16.5	14.7	1.80	9.166 SF		
600.0	598.7	598.9	597.6	1.2	1.2	-92.11	34.3	2.2	21.5	19.1	2.33	9.224		
700.0	697.5	698.4	695.9	1.5	1.5	-94.33	49.1	7.0	27.9	24.9	2.95	9.455		
800.0	795.6	797.7	793.4	1.9	1.9	-95.93	67.0	12.9	35.7	32.0	3.67	9.728		
900.0	893.1	896.9	890.0	2.3	2.3	-97.06	88.1	19.9	45.0	40.5	4.50	9.993		
916.4	908.9	913.2	905.9	2.4	2.3	-97.27	91.9	21.1	46.6	42.0	4.64	10.043		
1,000.0	990.0	996.4	986.6	2.7	2.7	-98.53	110.9	27.4	55.0	49.6	5.36	10.256		
1,100.0	1,086.8	1,095.9	1,083.2	3.2	3.1	-99.60	133.6	34.9	65.1	58.8	6.24	10.431		
1,200.0	1,183.7	1,195.4	1,179.7	3.7	3.6	-100.39	156.4	42.4	75.1	68.0	7.12	10.554		
1,300.0	1,280.6	1,294.8	1,276.3	4.1	4.0	-101.00	179.1	49.9	85.2	77.2	8.01	10.645		
1,400.0	1,377.5	1,394.3	1,372.8	4.6	4.5	-101.47	201.8	57.3	95.3	86.4	8.90	10.715		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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												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	-38.37	16.0	-12.7	20.4				
100.0	100.0	100.0	100.0	0.1	0.1	-38.37	16.0	-12.7	20.4	20.2	0.27	76.036	
200.0	200.0	200.0	200.0	0.3	0.3	-38.37	16.0	-12.7	20.4	19.8	0.62	33.078 CC, ES	
300.0	300.0	299.4	299.3	0.5	0.5	-82.81	17.7	-13.0	21.7	20.7	0.97	22.341	
400.0	399.8	398.6	398.4	0.7	0.7	-88.29	22.8	-13.8	25.6	24.2	1.35	18.993	
500.0	499.5	497.5	497.0	0.9	0.9	-94.34	31.3	-15.2	32.4	30.7	1.77	18.305 SF	
600.0	598.7	596.1	594.8	1.2	1.2	-99.41	43.0	-17.1	42.4	40.1	2.27	18.707	
700.0	697.5	694.1	691.7	1.5	1.5	-103.15	58.0	-19.6	55.5	52.6	2.84	19.515	
800.0	795.6	791.5	787.3	1.9	1.8	-105.79	76.1	-22.6	71.5	68.0	3.50	20.416	
900.0	893.1	888.1	881.5	2.3	2.2	-107.61	97.2	-26.0	90.6	86.3	4.26	21.266	
916.4	908.9	903.9	896.8	2.4	2.3	-107.85	100.9	-26.7	94.0	89.6	4.39	21.428	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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						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	-38.00	39.3	-30.7	49.9					
100.0	100.0	100.0	100.0	0.1	0.1	-38.00	39.3	-30.7	49.9	49.6	0.27	185.722		
200.0	200.0	200.0	200.0	0.3	0.3	-38.00	39.3	-30.7	49.9	49.3	0.62	80.794 CC, ES		
300.0	300.0	298.3	298.3	0.5	0.5	-81.57	40.9	-31.4	51.3	50.3	0.97	53.003		
400.0	399.8	396.4	396.2	0.7	0.7	-85.38	45.5	-33.5	55.6	54.3	1.34	41.609		
500.0	499.5	494.1	493.5	0.9	0.9	-90.49	53.1	-37.0	63.3	61.6	1.74	36.297		
600.0	598.7	591.1	589.9	1.2	1.2	-95.77	63.6	-41.8	74.7	72.5	2.21	33.832		
700.0	697.5	687.3	685.0	1.5	1.5	-100.47	77.0	-47.8	89.9	87.2	2.74	32.820 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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	-37.95	47.4	-36.9	60.1					
100.0	100.0	100.0	100.0	0.1	0.1	-37.95	47.4	-36.9	60.1	59.8	0.27	223.423		
200.0	200.0	200.0	200.0	0.3	0.3	-37.95	47.4	-36.9	60.1	59.4	0.62	97.195 CC, ES		
300.0	300.0	297.9	297.9	0.5	0.5	-81.67	48.7	-38.0	61.5	60.5	0.97	63.582		
400.0	399.8	395.5	395.4	0.7	0.7	-85.92	52.5	-41.1	66.0	64.7	1.33	49.534		
500.0	499.5	492.5	492.0	0.9	0.9	-91.73	59.0	-46.3	74.3	72.6	1.73	42.926		
600.0	598.7	588.7	587.5	1.2	1.1	-97.85	67.9	-53.4	86.9	84.8	2.18	39.960 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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 OM12D (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	-38.16	24.0	-18.9	30.6					
100.0	100.0	100.0	100.0	0.1	0.1	-38.16	24.0	-18.9	30.6	30.3	0.27	113.749		
200.0	200.0	200.0	200.0	0.3	0.3	-38.16	24.0	-18.9	30.6	30.0	0.62	49.484 CC, ES		
300.0	300.0	299.0	299.0	0.5	0.5	-82.31	25.7	-19.4	31.9	31.0	0.97	32.934		
400.0	399.8	397.8	397.6	0.7	0.7	-87.36	30.5	-21.1	36.2	34.8	1.34	26.963		
500.0	499.5	496.2	495.7	0.9	0.9	-93.47	38.6	-23.7	43.7	42.0	1.76	24.889		
600.0	598.7	594.1	592.9	1.2	1.2	-99.05	49.7	-27.5	54.9	52.6	2.24	24.544 SF		
700.0	697.5	691.3	688.9	1.5	1.5	-103.49	63.9	-32.2	69.6	66.8	2.79	24.966		
800.0	795.6	787.6	783.5	1.9	1.8	-106.79	81.0	-37.9	87.9	84.5	3.42	25.691		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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						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	-38.69	31.3	-25.1	40.1					
100.0	100.0	100.0	100.0	0.1	0.1	-38.69	31.3	-25.1	40.1	39.9	0.27	149.324		
200.0	200.0	200.0	200.0	0.3	0.3	-38.69	31.3	-25.1	40.1	39.5	0.62	64.960 CC, ES		
300.0	300.0	298.6	298.6	0.5	0.5	-83.59	32.4	-26.4	41.6	40.6	0.97	42.961		
400.0	399.8	396.8	396.6	0.7	0.7	-90.66	35.7	-30.2	46.5	45.2	1.34	34.817		
500.0	499.5	494.3	493.8	0.9	0.9	-99.37	41.2	-36.5	55.9	54.1	1.73	32.267 SF		
600.0	598.7	590.8	589.5	1.2	1.2	-107.32	48.7	-45.2	70.4	68.3	2.17	32.527		
700.0	697.5	685.8	683.5	1.5	1.4	-113.53	58.2	-56.2	90.4	87.7	2.65	34.157		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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	143.51	-8.4	6.2	10.4					
100.0	100.0	100.0	100.0	0.1	0.1	143.51	-8.4	6.2	10.4	10.2	0.27	38.808		
200.0	200.0	200.0	200.0	0.3	0.3	143.51	-8.4	6.2	10.4	9.8	0.62	16.883		
300.0	300.0	300.2	300.2	0.5	0.5	116.66	-7.6	4.6	9.6	8.6	0.97	9.831		
327.3	327.2	327.5	327.5	0.5	0.5	127.08	-7.1	3.7	9.4	8.3	1.07	8.747 CC, ES		
400.0	399.8	400.0	399.9	0.7	0.7	162.17	-5.3	-0.1	11.5	10.2	1.34	8.575 SF		
500.0	499.5	498.9	498.3	0.9	0.9	-167.71	-1.5	-7.8	22.6	20.8	1.72	13.114		
600.0	598.7	596.4	595.1	1.2	1.2	-156.27	3.7	-18.4	40.9	38.8	2.13	19.240		
700.0	697.5	692.8	690.5	1.5	1.5	-151.35	10.1	-31.4	64.9	62.4	2.56	25.357		
800.0	795.6	789.0	785.4	1.9	1.7	-149.84	16.7	-44.8	92.3	89.3	3.01	30.627		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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						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	141.40	-23.3	18.6	29.8					
100.0	100.0	100.0	100.0	0.1	0.1	141.40	-23.3	18.6	29.8	29.6	0.27	110.973		
200.0	200.0	200.0	200.0	0.3	0.3	141.40	-23.3	18.6	29.8	29.2	0.62	48.276		
300.0	300.0	300.6	300.5	0.5	0.5	105.38	-23.3	16.8	29.2	28.2	0.97	29.948		
354.0	353.9	354.6	354.5	0.6	0.6	114.03	-23.3	14.4	28.8	27.7	1.18	24.414 CC, ES		
400.0	399.8	400.5	400.3	0.7	0.7	124.19	-23.3	11.6	29.3	28.0	1.36	21.593		
500.0	499.5	499.2	498.7	0.9	0.9	149.82	-23.3	3.0	35.7	34.0	1.75	20.385 SF		
600.0	598.7	596.1	594.9	1.2	1.2	169.63	-23.3	-8.7	52.0	49.8	2.12	24.457		
700.0	697.5	692.5	690.3	1.5	1.4	-179.41	-23.3	-22.1	75.9	73.5	2.48	30.645		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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							
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	141.94	-31.7	24.8	40.2					
100.0	100.0	100.0	100.0	0.1	0.1	141.94	-31.7	24.8	40.2	40.0	0.27	149.735		
200.0	200.0	200.0	200.0	0.3	0.3	141.94	-31.7	24.8	40.2	39.6	0.62	65.139 CC		
200.8	200.8	200.8	200.8	0.3	0.3	99.79	-31.7	24.8	40.2	39.6	0.62	64.853		
300.0	300.0	300.0	300.0	0.5	0.5	104.67	-32.6	23.3	40.5	39.5	0.97	41.578 ES		
400.0	399.8	399.3	399.2	0.7	0.7	118.36	-35.4	18.9	43.0	41.6	1.36	31.674		
500.0	499.5	497.2	496.7	0.9	0.9	136.09	-39.9	11.8	51.6	49.9	1.75	29.464 SF		
600.0	598.7	593.7	592.5	1.2	1.1	151.21	-45.9	2.2	68.9	66.8	2.11	32.619		
700.0	697.5	689.9	687.9	1.5	1.4	160.94	-52.3	-7.9	92.8	90.4	2.44	37.972		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	140.96	-15.3	12.4	19.7					
100.0	100.0	100.0	100.0	0.1	0.1	140.96	-15.3	12.4	19.7	19.4	0.27	73.278		
200.0	200.0	200.0	200.0	0.3	0.3	140.96	-15.3	12.4	19.7	19.1	0.62	31.878 CC, ES		
300.0	300.0	299.9	299.9	0.5	0.5	98.76	-14.3	13.8	20.1	19.1	0.97	20.641		
400.0	399.8	399.9	399.7	0.7	0.7	98.63	-11.4	18.2	21.4	20.0	1.36	15.647		
500.0	499.5	499.8	499.2	0.9	0.9	98.45	-6.5	25.4	23.4	21.6	1.82	12.902		
600.0	598.7	599.7	598.4	1.2	1.2	98.23	0.3	35.4	26.3	24.0	2.35	11.209		
700.0	697.5	699.5	697.0	1.5	1.5	98.01	9.1	48.3	30.0	27.1	2.98	10.087		
800.0	795.6	799.3	794.9	1.9	1.9	97.79	19.8	64.1	34.6	30.9	3.72	9.307		
900.0	893.1	899.1	892.5	2.3	2.3	99.56	31.6	81.5	39.8	35.3	4.52	8.804		
916.4	908.9	915.5	908.5	2.4	2.3	100.26	33.6	84.4	40.7	36.1	4.66	8.748		
1,000.0	990.0	998.9	990.0	2.7	2.6	103.77	43.5	99.0	45.6	40.2	5.34	8.541		
1,100.0	1,086.8	1,098.7	1,087.6	3.2	3.0	107.08	55.3	116.4	51.5	45.4	6.14	8.391		
1,200.0	1,183.7	1,198.5	1,185.1	3.7	3.5	109.70	67.2	133.9	57.6	50.7	6.94	8.306		
1,300.0	1,280.6	1,298.3	1,282.6	4.1	3.9	111.81	79.0	151.3	63.8	56.1	7.73	8.259		
1,400.0	1,377.5	1,398.0	1,380.2	4.6	4.3	113.55	90.9	168.8	70.1	61.6	8.51	8.234		
1,500.0	1,474.4	1,497.8	1,477.7	5.0	4.7	115.00	102.7	186.2	76.4	67.1	9.29	8.224		
1,600.0	1,571.3	1,597.6	1,575.2	5.5	5.1	116.23	114.5	203.7	82.8	72.7	10.07	8.223 SF		
1,700.0	1,668.2	1,697.4	1,672.7	6.0	5.5	117.29	126.4	221.1	89.2	78.3	10.84	8.227		
1,800.0	1,765.1	1,797.2	1,770.3	6.4	5.9	118.20	138.2	238.5	95.6	84.0	11.61	8.236		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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							
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	141.75	-39.7	31.3	50.6					
100.0	100.0	100.0	100.0	0.1	0.1	141.75	-39.7	31.3	50.6	50.3	0.27	188.084		
200.0	200.0	200.0	200.0	0.3	0.3	141.75	-39.7	31.3	50.6	49.9	0.62	81.822 CC, ES		
300.0	300.0	298.8	298.8	0.5	0.5	100.06	-39.8	33.0	52.0	51.0	0.97	53.581		
400.0	399.8	397.5	397.3	0.7	0.7	101.28	-40.2	38.1	56.4	55.0	1.35	41.778		
500.0	499.5	495.9	495.3	0.9	0.9	102.93	-40.8	46.5	63.7	61.9	1.78	35.869		
600.0	598.7	593.9	592.6	1.2	1.2	104.65	-41.6	58.3	74.0	71.8	2.27	32.623		
700.0	697.5	691.3	688.9	1.5	1.5	106.24	-42.7	73.2	87.3	84.5	2.84	30.732 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Milk Cabin OM11D (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 OM11D (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 OM11D (M32 595 Pad)
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.63°

