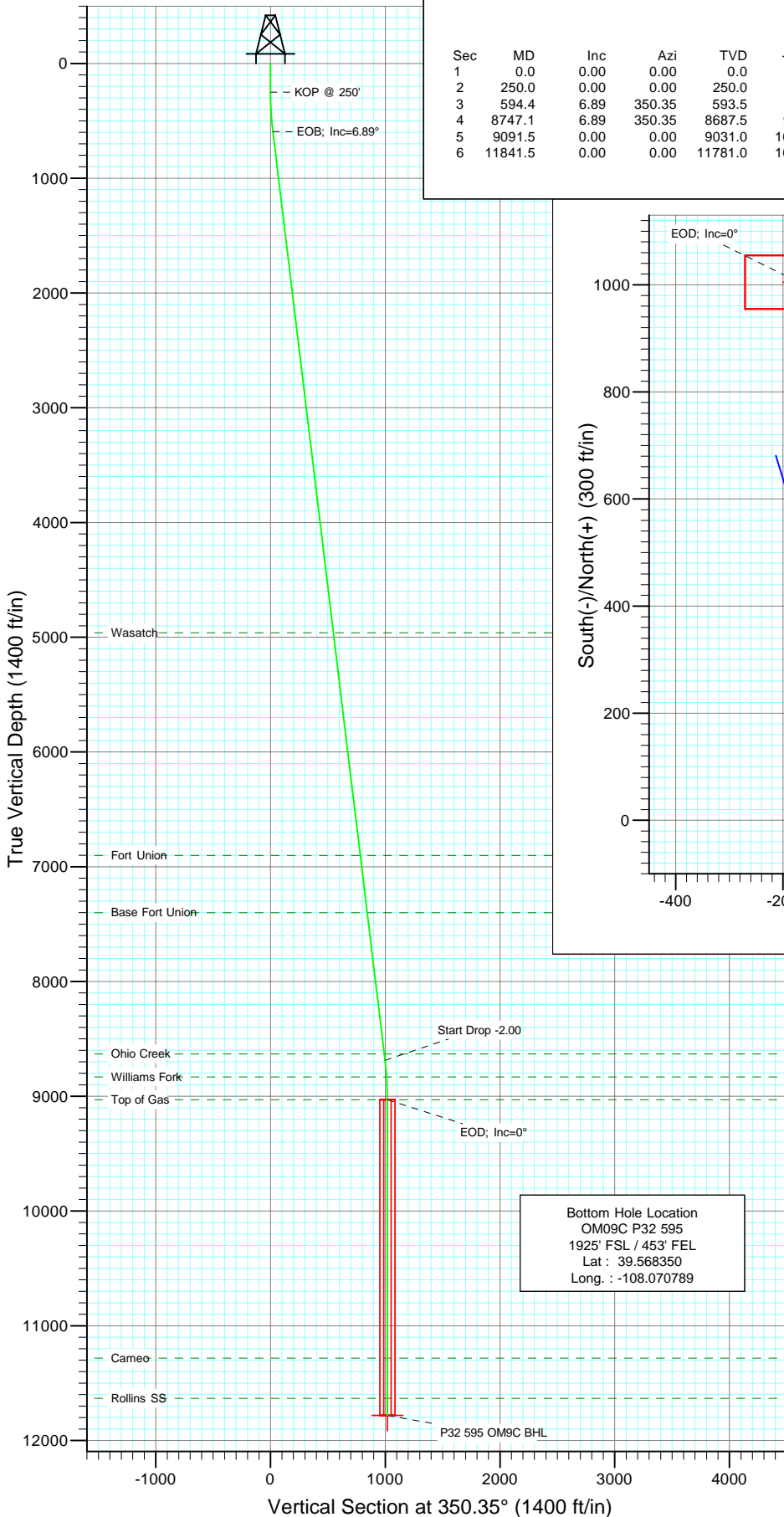




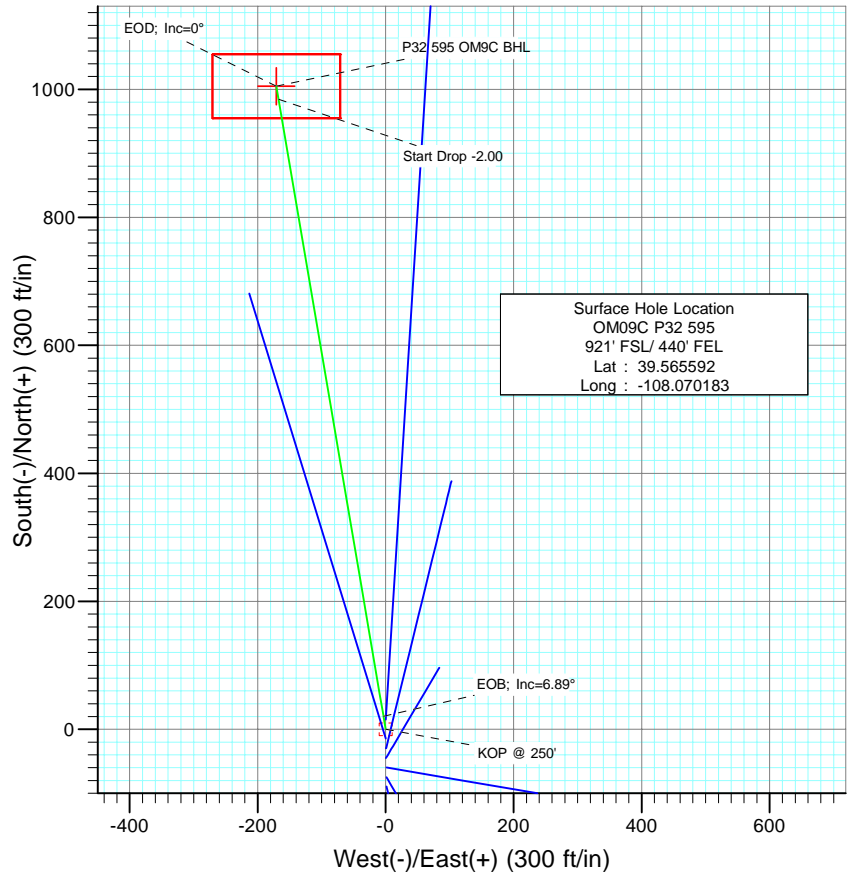
Berry Petroleum Company

Project: Garfield County
Site: P32 595
Well: OM09C P32 595
Wellbore: DD
Design: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	594.4	6.89	350.35	593.5	20.4	-3.5	2.00	350.35	20.7	
4	8747.1	6.89	350.35	8687.5	984.2	-167.4	0.00	0.00	998.4	
5	9091.5	0.00	0.00	9031.0	1004.6	-170.8	2.00	180.00	1019.0	
6	11841.5	0.00	0.00	11781.0	1004.6	-170.8	0.00	0.00	1019.0	P32 595 OM9C BHL

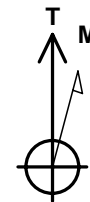


Surface Hole Location
OM09C P32 595
921' FSL/ 440' FEL
Lat : 39.565592
Long : -108.070183

Bottom Hole Location
OM09C P32 595
1925' FSL / 453' FEL
Lat : 39.568350
Long : -108.070789

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4961.0	4993.6	Wasatch
6901.0	6947.7	Fort Union
7401.0	7451.3	Base Fort Union
8631.0	8690.3	Ohio Creek
8831.0	8891.3	Williams Fork
9031.0	9091.5	Top of Gas
11281.0	11341.5	Cameo
11631.0	11691.5	Rollins SS



Azimuths to True North
Magnetic North: 10.67°

Magnetic Field
Strength: 52516.9nT
Dip Angle: 65.85°
Date: 2/23/2009
Model: IGRF200510

DESIGN DETAILS: Plan #1

Target	Azimuth	Origin	N/S	E/W	From TVD
P32 595 OM9C BHL	350.35	Slot	0.0	0.0	0.0

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM09C P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM09C P32 595	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		P32 595			
Site Position:		Northing:	1,641,133.56 ft	Latitude:	39.565553
From:	Lat/Long	Easting:	2,275,511.10 ft	Longitude:	-108.070183
Position Uncertainty:	0.0 ft	Slot Radius:	in	Grid Convergence:	-1.62 °

Well	OM09C P32 595					
Well Position	+N/-S	0.0 ft	Northing:	1,641,147.75 ft	Latitude:	39.565592
	+E/-W	0.0 ft	Easting:	2,275,511.50 ft	Longitude:	-108.070183
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,358.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	2/23/2009	10.67	65.85	52,517

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	350.35

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
594.4	6.89	350.35	593.5	20.4	-3.5	2.00	2.00	0.00	350.35	
8,747.1	6.89	350.35	8,687.5	984.2	-167.4	0.00	0.00	0.00	0.00	
9,091.5	0.00	0.00	9,031.0	1,004.6	-170.8	2.00	-2.00	0.00	180.00	
11,841.5	0.00	0.00	11,781.0	1,004.6	-170.8	0.00	0.00	0.00	0.00	P32 595 OM9C BHL

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM09C P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM09C P32 595	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	
100.0	0.00	0.00	100.0	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	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	KOP @ 250'
300.0	1.00	350.35	300.0	0.4	-0.1	0.4	2.00	2.00	
400.0	3.00	350.35	399.9	3.9	-0.7	3.9	2.00	2.00	
500.0	5.00	350.35	499.7	10.7	-1.8	10.9	2.00	2.00	
594.4	6.89	350.35	593.5	20.4	-3.5	20.7	2.00	2.00	EOB; Inc=6.89°
600.0	6.89	350.35	599.1	21.0	-3.6	21.3	0.00	0.00	
700.0	6.89	350.35	698.4	32.9	-5.6	33.3	0.00	0.00	
800.0	6.89	350.35	797.7	44.7	-7.6	45.3	0.00	0.00	
900.0	6.89	350.35	897.0	56.5	-9.6	57.3	0.00	0.00	
1,000.0	6.89	350.35	996.2	68.3	-11.6	69.3	0.00	0.00	
1,100.0	6.89	350.35	1,095.5	80.2	-13.6	81.3	0.00	0.00	
1,200.0	6.89	350.35	1,194.8	92.0	-15.6	93.3	0.00	0.00	
1,300.0	6.89	350.35	1,294.1	103.8	-17.7	105.3	0.00	0.00	
1,400.0	6.89	350.35	1,393.4	115.6	-19.7	117.3	0.00	0.00	
1,500.0	6.89	350.35	1,492.6	127.4	-21.7	129.3	0.00	0.00	
1,600.0	6.89	350.35	1,591.9	139.3	-23.7	141.3	0.00	0.00	
1,700.0	6.89	350.35	1,691.2	151.1	-25.7	153.3	0.00	0.00	
1,800.0	6.89	350.35	1,790.5	162.9	-27.7	165.3	0.00	0.00	
1,900.0	6.89	350.35	1,889.7	174.7	-29.7	177.2	0.00	0.00	
2,000.0	6.89	350.35	1,989.0	186.6	-31.7	189.2	0.00	0.00	
2,100.0	6.89	350.35	2,088.3	198.4	-33.7	201.2	0.00	0.00	
2,200.0	6.89	350.35	2,187.6	210.2	-35.7	213.2	0.00	0.00	
2,300.0	6.89	350.35	2,286.9	222.0	-37.8	225.2	0.00	0.00	
2,400.0	6.89	350.35	2,386.1	233.8	-39.8	237.2	0.00	0.00	
2,500.0	6.89	350.35	2,485.4	245.7	-41.8	249.2	0.00	0.00	
2,600.0	6.89	350.35	2,584.7	257.5	-43.8	261.2	0.00	0.00	
2,700.0	6.89	350.35	2,684.0	269.3	-45.8	273.2	0.00	0.00	
2,800.0	6.89	350.35	2,783.3	281.1	-47.8	285.2	0.00	0.00	
2,900.0	6.89	350.35	2,882.5	293.0	-49.8	297.2	0.00	0.00	
3,000.0	6.89	350.35	2,981.8	304.8	-51.8	309.2	0.00	0.00	
3,100.0	6.89	350.35	3,081.1	316.6	-53.8	321.1	0.00	0.00	
3,200.0	6.89	350.35	3,180.4	328.4	-55.9	333.1	0.00	0.00	
3,300.0	6.89	350.35	3,279.6	340.2	-57.9	345.1	0.00	0.00	
3,400.0	6.89	350.35	3,378.9	352.1	-59.9	357.1	0.00	0.00	
3,500.0	6.89	350.35	3,478.2	363.9	-61.9	369.1	0.00	0.00	
3,600.0	6.89	350.35	3,577.5	375.7	-63.9	381.1	0.00	0.00	
3,700.0	6.89	350.35	3,676.8	387.5	-65.9	393.1	0.00	0.00	
3,800.0	6.89	350.35	3,776.0	399.4	-67.9	405.1	0.00	0.00	
3,900.0	6.89	350.35	3,875.3	411.2	-69.9	417.1	0.00	0.00	
4,000.0	6.89	350.35	3,974.6	423.0	-71.9	429.1	0.00	0.00	
4,100.0	6.89	350.35	4,073.9	434.8	-73.9	441.1	0.00	0.00	
4,200.0	6.89	350.35	4,173.2	446.6	-76.0	453.1	0.00	0.00	
4,300.0	6.89	350.35	4,272.4	458.5	-78.0	465.1	0.00	0.00	
4,400.0	6.89	350.35	4,371.7	470.3	-80.0	477.0	0.00	0.00	
4,500.0	6.89	350.35	4,471.0	482.1	-82.0	489.0	0.00	0.00	
4,600.0	6.89	350.35	4,570.3	493.9	-84.0	501.0	0.00	0.00	
4,700.0	6.89	350.35	4,669.5	505.8	-86.0	513.0	0.00	0.00	
4,800.0	6.89	350.35	4,768.8	517.6	-88.0	525.0	0.00	0.00	
4,900.0	6.89	350.35	4,868.1	529.4	-90.0	537.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM09C P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM09C P32 595	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
4,993.6	6.89	350.35	4,961.0	540.5	-91.9	548.2	0.00	0.00	Wasatch
5,000.0	6.89	350.35	4,967.4	541.2	-92.0	549.0	0.00	0.00	
5,100.0	6.89	350.35	5,066.7	553.1	-94.0	561.0	0.00	0.00	
5,200.0	6.89	350.35	5,165.9	564.9	-96.1	573.0	0.00	0.00	
5,300.0	6.89	350.35	5,265.2	576.7	-98.1	585.0	0.00	0.00	
5,400.0	6.89	350.35	5,364.5	588.5	-100.1	597.0	0.00	0.00	
5,500.0	6.89	350.35	5,463.8	600.3	-102.1	609.0	0.00	0.00	
5,600.0	6.89	350.35	5,563.0	612.2	-104.1	621.0	0.00	0.00	
5,700.0	6.89	350.35	5,662.3	624.0	-106.1	632.9	0.00	0.00	
5,800.0	6.89	350.35	5,761.6	635.8	-108.1	644.9	0.00	0.00	
5,900.0	6.89	350.35	5,860.9	647.6	-110.1	656.9	0.00	0.00	Fort Union
6,000.0	6.89	350.35	5,960.2	659.5	-112.1	668.9	0.00	0.00	
6,100.0	6.89	350.35	6,059.4	671.3	-114.2	680.9	0.00	0.00	
6,200.0	6.89	350.35	6,158.7	683.1	-116.2	692.9	0.00	0.00	
6,300.0	6.89	350.35	6,258.0	694.9	-118.2	704.9	0.00	0.00	
6,400.0	6.89	350.35	6,357.3	706.7	-120.2	716.9	0.00	0.00	
6,500.0	6.89	350.35	6,456.6	718.6	-122.2	728.9	0.00	0.00	
6,600.0	6.89	350.35	6,555.8	730.4	-124.2	740.9	0.00	0.00	
6,700.0	6.89	350.35	6,655.1	742.2	-126.2	752.9	0.00	0.00	
6,800.0	6.89	350.35	6,754.4	754.0	-128.2	764.9	0.00	0.00	
6,900.0	6.89	350.35	6,853.7	765.9	-130.2	776.8	0.00	0.00	Base Fort Union
6,947.7	6.89	350.35	6,901.0	771.5	-131.2	782.6	0.00	0.00	
7,000.0	6.89	350.35	6,952.9	777.7	-132.2	788.8	0.00	0.00	
7,100.0	6.89	350.35	7,052.2	789.5	-134.3	800.8	0.00	0.00	
7,200.0	6.89	350.35	7,151.5	801.3	-136.3	812.8	0.00	0.00	
7,300.0	6.89	350.35	7,250.8	813.1	-138.3	824.8	0.00	0.00	
7,400.0	6.89	350.35	7,350.1	825.0	-140.3	836.8	0.00	0.00	
7,451.3	6.89	350.35	7,401.0	831.0	-141.3	843.0	0.00	0.00	
7,500.0	6.89	350.35	7,449.3	836.8	-142.3	848.8	0.00	0.00	
7,600.0	6.89	350.35	7,548.6	848.6	-144.3	860.8	0.00	0.00	Ohio Creek
7,700.0	6.89	350.35	7,647.9	860.4	-146.3	872.8	0.00	0.00	
7,800.0	6.89	350.35	7,747.2	872.3	-148.3	884.8	0.00	0.00	
7,900.0	6.89	350.35	7,846.5	884.1	-150.3	896.8	0.00	0.00	
8,000.0	6.89	350.35	7,945.7	895.9	-152.4	908.8	0.00	0.00	
8,100.0	6.89	350.35	8,045.0	907.7	-154.4	920.8	0.00	0.00	
8,200.0	6.89	350.35	8,144.3	919.5	-156.4	932.7	0.00	0.00	
8,300.0	6.89	350.35	8,243.6	931.4	-158.4	944.7	0.00	0.00	
8,400.0	6.89	350.35	8,342.8	943.2	-160.4	956.7	0.00	0.00	
8,500.0	6.89	350.35	8,442.1	955.0	-162.4	968.7	0.00	0.00	Williams Fork
8,600.0	6.89	350.35	8,541.4	966.8	-164.4	980.7	0.00	0.00	
8,690.3	6.89	350.35	8,631.0	977.5	-166.2	991.5	0.00	0.00	
8,700.0	6.89	350.35	8,640.7	978.7	-166.4	992.7	0.00	0.00	
8,747.1	6.89	350.35	8,687.5	984.2	-167.4	998.4	0.00	0.00	
8,800.0	5.83	350.35	8,740.0	990.0	-168.4	1,004.2	2.00	-2.00	
8,891.3	4.00	350.35	8,831.0	997.7	-169.7	1,012.0	2.00	-2.00	
8,900.0	3.83	350.35	8,839.7	998.3	-169.8	1,012.6	2.00	-2.00	
9,000.0	1.83	350.35	8,939.5	1,003.2	-170.6	1,017.6	2.00	-2.00	
9,091.5	0.00	0.00	9,031.0	1,004.6	-170.8	1,019.0	2.00	-2.00	EOD; Inc=0° - Top of Gas
9,100.0	0.00	0.00	9,039.5	1,004.6	-170.8	1,019.0	0.00	0.00	
9,200.0	0.00	0.00	9,139.5	1,004.6	-170.8	1,019.0	0.00	0.00	
9,300.0	0.00	0.00	9,239.5	1,004.6	-170.8	1,019.0	0.00	0.00	
9,400.0	0.00	0.00	9,339.5	1,004.6	-170.8	1,019.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM09C P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM09C P32 595	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
9,500.0	0.00	0.00	9,439.5	1,004.6	-170.8	1,019.0	0.00	0.00	
9,600.0	0.00	0.00	9,539.5	1,004.6	-170.8	1,019.0	0.00	0.00	
9,700.0	0.00	0.00	9,639.5	1,004.6	-170.8	1,019.0	0.00	0.00	
9,800.0	0.00	0.00	9,739.5	1,004.6	-170.8	1,019.0	0.00	0.00	
9,900.0	0.00	0.00	9,839.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,000.0	0.00	0.00	9,939.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,100.0	0.00	0.00	10,039.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,200.0	0.00	0.00	10,139.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,300.0	0.00	0.00	10,239.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,400.0	0.00	0.00	10,339.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,500.0	0.00	0.00	10,439.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,600.0	0.00	0.00	10,539.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,700.0	0.00	0.00	10,639.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,800.0	0.00	0.00	10,739.5	1,004.6	-170.8	1,019.0	0.00	0.00	
10,900.0	0.00	0.00	10,839.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,000.0	0.00	0.00	10,939.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,100.0	0.00	0.00	11,039.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,200.0	0.00	0.00	11,139.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,300.0	0.00	0.00	11,239.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,341.5	0.00	0.00	11,281.0	1,004.6	-170.8	1,019.0	0.00	0.00	Cameo
11,400.0	0.00	0.00	11,339.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,500.0	0.00	0.00	11,439.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,600.0	0.00	0.00	11,539.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,691.5	0.00	0.00	11,631.0	1,004.6	-170.8	1,019.0	0.00	0.00	Rollins SS
11,700.0	0.00	0.00	11,639.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,800.0	0.00	0.00	11,739.5	1,004.6	-170.8	1,019.0	0.00	0.00	
11,841.5	0.00	0.00	11,781.0	1,004.6	-170.8	1,019.0	0.00	0.00	TD at 11841.5 - P32 595 OM9C BHL

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
P32 595 OM9C BHL	0.00	0.00	11,781.0	1,004.6	-170.8	1,642,156.79	2,275,369.15	39.568350	-108.070789
- hit/miss target									
- Shape									
- plan hits target center									
- Rectangle (sides W100.0 H200.0 D0.0)									

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM09C P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,993.6	4,961.0	Wasatch				
6,947.7	6,901.0	Fort Union				
7,451.3	7,401.0	Base Fort Union				
8,690.3	8,631.0	Ohio Creek				
8,891.3	8,831.0	Williams Fork				
9,091.5	9,031.0	Top of Gas				
11,341.5	11,281.0	Cameo				
11,691.5	11,631.0	Rollins SS				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
250.0	250.0	0.0	0.0	KOP @ 250'	
594.4	593.5	20.4	-3.5	EOB; Inc=6.89°	
8,747.1	8,687.5	984.2	-167.4	Start Drop -2.00	
9,091.5	9,031.0	1,004.6	-170.8	EOD; Inc=0°	
11,841.5	11,781.0	1,004.6	-170.8	TD at 11841.5	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 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:	MD Interval 100.0ft	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	2/24/2009		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,841.1	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						
(Sec 8-6S-R96 SWNW original)						
Chevron #22-8D - ST 100' N - Plan #1						Out of range
Chevron #22-8D - ST 300' N - Plan #1						Out of range
(Sec 8-6S-R96 SWNW)						
Chevron #22-8D - ST 100' N - Plan #1						Out of range
P32 595						
OM01A P32 595 - DD - Plan #1	200.0	200.0	89.3	88.7	148.663	CC, ES
OM01A P32 595 - DD - Plan #1	400.0	393.4	99.8	98.5	77.558	SF
OM09B P32 595 - DD - Plan #1	200.0	200.0	14.9	14.3	24.874	CC, ES
OM09B P32 595 - DD - Plan #1	2,300.0	2,295.3	97.5	87.8	10.111	SF
OM09D P32 595 - DD - Plan #1	200.0	200.0	14.2	13.6	23.668	CC
OM09D P32 595 - DD - Plan #1	227.8	227.8	14.3	13.6	20.469	ES
OM09D P32 595 - DD - Plan #1	2,700.0	2,699.9	97.7	88.0	10.037	SF
OM13B P32 595 - DD - Plan #1	200.0	200.0	59.8	59.2	99.524	CC
OM13B P32 595 - DD - Plan #1	203.7	203.7	59.8	59.1	97.425	ES
OM13B P32 595 - DD - Plan #1	600.0	596.9	88.2	86.2	42.893	SF
OM16A P32 595 - DD - Plan #1	200.0	200.0	29.5	28.9	49.150	CC
OM16A P32 595 - DD - Plan #1	227.8	227.8	29.6	28.9	42.408	ES
OM16A P32 595 - DD - Plan #1	1,500.0	1,500.7	98.6	93.3	18.614	SF
OM16B P32 595 - DD - Plan #1	200.0	200.0	44.8	44.2	74.628	CC
OM16B P32 595 - DD - Plan #1	227.8	227.8	44.9	44.2	64.342	ES
OM16B P32 595 - DD - Plan #1	1,100.0	1,101.7	98.7	94.8	25.721	SF
OM16D P32 595 - DD - Plan #1	200.0	200.0	75.0	74.4	124.999	CC
OM16D P32 595 - DD - Plan #1	227.8	227.8	75.1	74.4	107.708	ES
OM16D P32 595 - DD - Plan #1	600.0	599.1	96.2	94.2	48.355	SF
Sec29 T5S R96W						
Latham 29-18D - DD - Plan #1						Out of range
Latham 29-19D - DD - Plan #1						Out of range
Latham 29-30D - DD - Plan #1						Out of range

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design P32 595 - OM01A P32 595 - 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	179.10	-89.2	1.4	89.3					
100.0	100.0	100.0	100.0	0.1	0.1	179.10	-89.2	1.4	89.3	89.0	0.25	355.139		
200.0	200.0	200.0	200.0	0.3	0.3	179.10	-89.2	1.4	89.3	88.7	0.60	148.663 CC, ES		
300.0	300.0	297.0	297.0	0.5	0.5	-171.48	-90.9	1.7	91.4	90.4	0.94	96.749		
400.0	399.9	393.4	393.3	0.7	0.7	-172.25	-95.6	2.7	99.8	98.5	1.29	77.558 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design P32 595 - OM09B P32 595 - 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	0.00	14.9	0.0	14.9					
100.0	100.0	100.0	100.0	0.1	0.1	0.00	14.9	0.0	14.9	14.7	0.25	59.421		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	14.9	0.0	14.9	14.3	0.60	24.874 CC, ES		
300.0	300.0	299.5	299.4	0.5	0.5	10.29	16.7	0.1	16.2	15.3	0.95	17.120		
400.0	399.9	398.8	398.7	0.7	0.7	13.10	21.8	0.4	18.0	16.7	1.30	13.904		
500.0	499.7	498.2	497.6	0.9	0.9	17.66	30.4	1.0	20.0	18.3	1.65	12.122		
600.0	599.1	597.4	596.1	1.1	1.2	23.37	42.4	1.7	22.2	20.2	2.01	11.037		
700.0	698.4	697.0	694.6	1.4	1.5	28.00	57.3	2.7	26.0	23.6	2.40	10.843		
800.0	797.7	796.9	793.3	1.6	1.8	31.26	72.5	3.6	30.3	27.5	2.81	10.784		
900.0	897.0	896.8	892.0	1.9	2.1	33.70	87.7	4.6	34.7	31.4	3.23	10.717		
1,000.0	996.2	996.6	990.7	2.1	2.4	35.60	103.0	5.5	39.0	35.4	3.67	10.647		
1,100.0	1,095.5	1,096.5	1,089.5	2.4	2.7	37.12	118.2	6.5	43.5	39.4	4.11	10.580		
1,200.0	1,194.8	1,196.4	1,188.2	2.7	3.0	38.35	133.4	7.4	47.9	43.4	4.55	10.518		
1,300.0	1,294.1	1,296.3	1,286.9	2.9	3.3	39.38	148.7	8.4	52.4	47.4	5.01	10.461		
1,400.0	1,393.4	1,396.2	1,385.6	3.2	3.6	40.24	163.9	9.3	56.9	51.4	5.46	10.409		
1,500.0	1,492.6	1,496.1	1,484.4	3.5	3.9	40.98	179.1	10.3	61.3	55.4	5.92	10.362		
1,600.0	1,591.9	1,596.0	1,583.1	3.8	4.3	41.61	194.4	11.3	65.8	59.5	6.38	10.319		
1,700.0	1,691.2	1,695.9	1,681.8	4.0	4.6	42.17	209.6	12.2	70.3	63.5	6.84	10.281		
1,800.0	1,790.5	1,795.8	1,780.5	4.3	4.9	42.65	224.8	13.2	74.9	67.5	7.31	10.246		
1,900.0	1,889.7	1,895.7	1,879.2	4.6	5.2	43.09	240.1	14.1	79.4	71.6	7.77	10.214		
2,000.0	1,989.0	1,995.6	1,978.0	4.8	5.5	43.47	255.3	15.1	83.9	75.7	8.24	10.185		
2,100.0	2,088.3	2,095.5	2,076.7	5.1	5.8	43.82	270.5	16.0	88.4	79.7	8.70	10.158		
2,200.0	2,187.6	2,195.4	2,175.4	5.4	6.2	44.13	285.8	17.0	92.9	83.8	9.17	10.134		
2,300.0	2,286.9	2,295.3	2,274.1	5.7	6.5	44.42	301.0	17.9	97.5	87.8	9.64	10.111 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design P32 595 - OM09D P32 595 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-14.2	0.0	14.2					
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-14.2	0.0	14.2	14.0	0.25	56.540		
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-14.2	0.0	14.2	13.6	0.60	23.668 CC		
227.8	227.8	227.8	227.8	0.3	0.3	-170.39	-14.2	0.0	14.3	13.6	0.70	20.469 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-170.63	-14.2	0.0	14.6	13.7	0.95	15.421		
400.0	399.9	400.5	400.5	0.7	0.7	-170.85	-12.5	-0.5	16.4	15.1	1.30	12.630		
500.0	499.7	501.1	500.9	0.9	0.8	-169.61	-7.5	-2.1	18.3	16.6	1.65	11.064		
600.0	599.1	601.3	600.8	1.1	1.1	-167.86	0.4	-4.5	20.7	18.7	2.00	10.332		
700.0	698.4	701.2	700.4	1.4	1.3	-167.05	8.6	-7.0	24.4	22.0	2.37	10.303		
800.0	797.7	801.2	799.9	1.6	1.5	-166.45	16.8	-9.5	28.0	25.3	2.73	10.275		
900.0	897.0	901.1	899.5	1.9	1.7	-165.99	25.0	-12.0	31.7	28.6	3.09	10.248		
1,000.0	996.2	1,001.0	999.1	2.1	1.9	-165.63	33.2	-14.5	35.4	31.9	3.46	10.225		
1,100.0	1,095.5	1,101.0	1,098.6	2.4	2.2	-165.33	41.4	-17.1	39.0	35.2	3.82	10.203		
1,200.0	1,194.8	1,200.9	1,198.2	2.7	2.4	-165.09	49.6	-19.6	42.7	38.5	4.19	10.184		
1,300.0	1,294.1	1,300.8	1,297.8	2.9	2.6	-164.88	57.8	-22.1	46.3	41.8	4.56	10.166		
1,400.0	1,393.4	1,400.8	1,397.3	3.2	2.8	-164.70	66.0	-24.6	50.0	45.1	4.93	10.151		
1,500.0	1,492.6	1,500.7	1,496.9	3.5	3.1	-164.55	74.2	-27.1	53.7	48.4	5.30	10.137		
1,600.0	1,591.9	1,600.6	1,596.4	3.8	3.3	-164.42	82.4	-29.6	57.3	51.7	5.66	10.124		
1,700.0	1,691.2	1,700.6	1,696.0	4.0	3.5	-164.30	90.6	-32.1	61.0	55.0	6.03	10.112		
1,800.0	1,790.5	1,800.5	1,795.6	4.3	3.8	-164.20	98.8	-34.7	64.7	58.3	6.40	10.102		
1,900.0	1,889.7	1,900.4	1,895.1	4.6	4.0	-164.11	107.0	-37.2	68.4	61.6	6.77	10.092		
2,000.0	1,989.0	2,000.4	1,994.7	4.8	4.2	-164.02	115.2	-39.7	72.0	64.9	7.14	10.083		
2,100.0	2,088.3	2,100.3	2,094.3	5.1	4.4	-163.95	123.4	-42.2	75.7	68.2	7.51	10.075		
2,200.0	2,187.6	2,200.2	2,193.8	5.4	4.7	-163.88	131.6	-44.7	79.4	71.5	7.88	10.067		
2,300.0	2,286.9	2,300.2	2,293.4	5.7	4.9	-163.82	139.8	-47.2	83.0	74.8	8.25	10.060		
2,400.0	2,386.1	2,400.1	2,393.0	5.9	5.1	-163.76	148.0	-49.7	86.7	78.1	8.62	10.054		
2,500.0	2,485.4	2,500.0	2,492.5	6.2	5.4	-163.71	156.2	-52.3	90.4	81.4	8.99	10.048		
2,600.0	2,584.7	2,600.0	2,592.1	6.5	5.6	-163.66	164.4	-54.8	94.0	84.7	9.36	10.042		
2,700.0	2,684.0	2,699.9	2,691.7	6.7	5.8	-163.62	172.6	-57.3	97.7	88.0	9.73	10.037 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design P32 595 - OM13B P32 595 - 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	178.65	-59.7	1.4	59.8					
100.0	100.0	100.0	100.0	0.1	0.1	178.65	-59.7	1.4	59.8	59.5	0.25	237.751		
200.0	200.0	200.0	200.0	0.3	0.3	178.65	-59.7	1.4	59.8	59.2	0.60	99.524 CC		
203.7	203.7	203.7	203.7	0.3	0.3	-171.70	-59.7	1.4	59.8	59.1	0.61	97.425 ES		
300.0	300.0	299.6	299.5	0.5	0.5	-173.37	-60.0	3.1	60.5	59.6	0.95	63.578		
400.0	399.9	398.7	398.6	0.7	0.7	-178.13	-60.9	8.2	65.4	64.1	1.32	49.566		
500.0	499.7	498.0	497.6	0.9	0.9	176.46	-62.1	15.2	74.8	73.2	1.69	44.323		
600.0	599.1	596.9	596.3	1.1	1.1	172.56	-63.3	22.2	88.2	86.2	2.06	42.893 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design P32 595 - OM16A P32 595 - 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	178.91	-29.5	0.6	29.5					
100.0	100.0	100.0	100.0	0.1	0.1	178.91	-29.5	0.6	29.5	29.3	0.25	117.414		
200.0	200.0	200.0	200.0	0.3	0.3	178.91	-29.5	0.6	29.5	28.9	0.60	49.150 CC		
227.8	227.8	227.8	227.8	0.3	0.3	-171.46	-29.5	0.6	29.6	28.9	0.70	42.408 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-171.57	-29.5	0.6	29.9	29.0	0.95	31.538		
400.0	399.9	400.2	400.2	0.7	0.6	-172.54	-29.3	0.6	33.2	31.9	1.30	25.566		
500.0	499.7	500.7	500.6	0.9	0.8	-174.61	-27.6	1.0	38.4	36.8	1.65	23.355		
600.0	599.1	601.1	601.0	1.1	1.0	-177.22	-24.2	1.9	45.6	43.6	1.99	22.862		
700.0	698.4	701.6	701.4	1.4	1.2	-179.88	-19.0	3.1	52.7	50.4	2.35	22.466		
800.0	797.7	802.0	801.5	1.6	1.4	177.41	-12.3	4.8	58.5	55.8	2.70	21.630		
900.0	897.0	901.8	901.0	1.9	1.6	175.05	-5.3	6.5	64.0	60.9	3.06	20.900		
1,000.0	996.2	1,001.6	1,000.6	2.1	1.8	173.08	1.7	8.2	69.6	66.2	3.43	20.324		
1,100.0	1,095.5	1,101.4	1,100.2	2.4	2.0	171.40	8.7	9.9	75.3	71.5	3.79	19.857		
1,200.0	1,194.8	1,201.2	1,199.7	2.7	2.2	169.96	15.8	11.6	81.1	76.9	4.17	19.469		
1,300.0	1,294.1	1,301.0	1,299.3	2.9	2.4	168.71	22.8	13.4	86.9	82.4	4.54	19.140		
1,400.0	1,393.4	1,400.8	1,398.8	3.2	2.6	167.62	29.8	15.1	92.7	87.8	4.92	18.859		
1,500.0	1,492.6	1,500.7	1,498.4	3.5	2.9	166.65	36.8	16.8	98.6	93.3	5.30	18.614 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design P32 595 - OM16B P32 595 - 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	179.28	-44.8	0.6	44.8					
100.0	100.0	100.0	100.0	0.1	0.1	179.28	-44.8	0.6	44.8	44.6	0.25	178.277		
200.0	200.0	200.0	200.0	0.3	0.3	179.28	-44.8	0.6	44.8	44.2	0.60	74.628 CC		
227.8	227.8	227.8	227.8	0.3	0.3	-171.08	-44.8	0.6	44.9	44.2	0.70	64.342 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-171.15	-44.8	0.6	45.2	44.3	0.95	47.650		
400.0	399.9	399.9	399.9	0.7	0.6	-171.78	-44.8	0.6	48.7	47.4	1.30	37.522		
500.0	499.7	500.5	500.5	0.9	0.8	-173.30	-44.0	1.0	54.9	53.2	1.65	33.336		
600.0	599.1	601.0	600.9	1.1	1.0	-175.73	-41.8	2.4	63.1	61.1	1.99	31.660		
700.0	698.4	701.5	701.3	1.4	1.2	-178.53	-38.0	4.6	71.6	69.3	2.35	30.514		
800.0	797.7	802.2	801.8	1.6	1.4	178.44	-32.7	7.7	79.0	76.2	2.71	29.160		
900.0	897.0	902.3	901.7	1.9	1.6	175.23	-26.1	11.6	85.4	82.3	3.08	27.760		
1,000.0	996.2	1,002.0	1,001.1	2.1	1.8	172.41	-19.4	15.6	91.9	88.5	3.45	26.631		
1,100.0	1,095.5	1,101.7	1,100.5	2.4	2.0	169.97	-12.6	19.5	98.7	94.8	3.84	25.721 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													P32 595 - OM16D P32 595 - 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	178.92	-75.0	1.4	75.0								
100.0	100.0	100.0	100.0	0.1	0.1	178.92	-75.0	1.4	75.0	74.8	0.25	298.607					
200.0	200.0	200.0	200.0	0.3	0.3	178.92	-75.0	1.4	75.0	74.4	0.60	124.999	CC				
227.8	227.8	227.8	227.8	0.3	0.3	-171.43	-75.0	1.4	75.1	74.4	0.70	107.708	ES				
300.0	300.0	300.0	300.0	0.5	0.5	-171.47	-75.0	1.4	75.5	74.5	0.95	79.505					
400.0	399.9	399.9	399.9	0.7	0.6	-171.84	-75.0	1.4	78.9	77.6	1.30	60.830					
500.0	499.7	499.7	499.7	0.9	0.8	-172.48	-75.0	1.4	85.8	84.2	1.64	52.200					
600.0	599.1	599.1	599.1	1.1	1.0	-173.27	-75.0	1.4	96.2	94.2	1.99	48.355	SF				

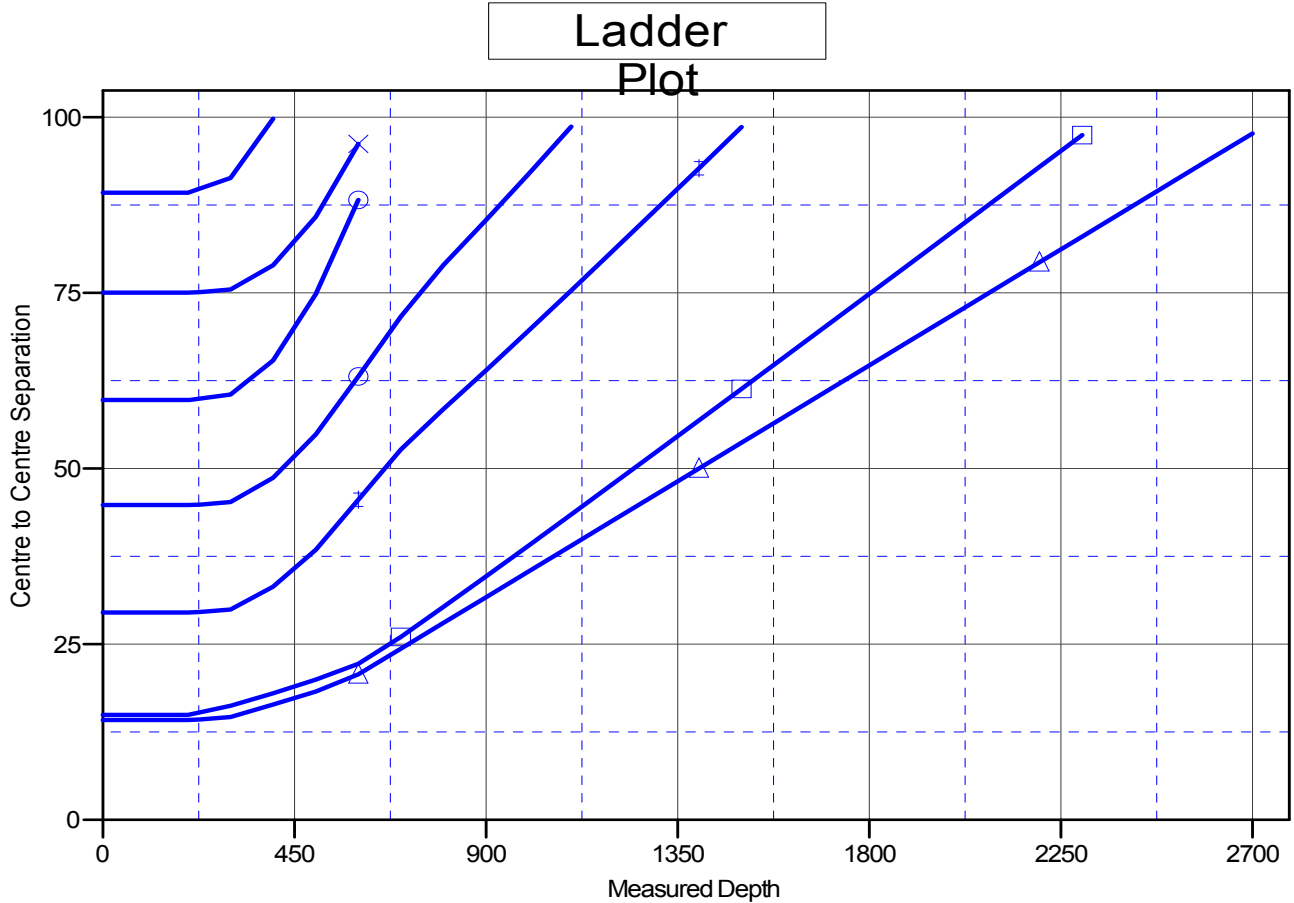
Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM09C P32 595
Project:	Garfield County	TVD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM09C P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM09C P32 595	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB OM09C P32 @ 8386.0ft (Rig Nam
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: OM09C P32 595
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.62°



LEGEND

- ⊕ OM13B P32 595, DD, Plan#1 V0
 ✕ OM16D P32 595, DD, Plan#1 V0
 ⊕ OM16A P32 595, DD, Plan#1 V0
- ⊕ OM09B P32 595, DD, Plan#1 V0
 ⊕ OM16B P32 595, DD, Plan#1 V0
- ⊕ OM01A P32 595, DD, Plan#1 V0
 ⊕ OM09D P32 595, DD, Plan#1 V0