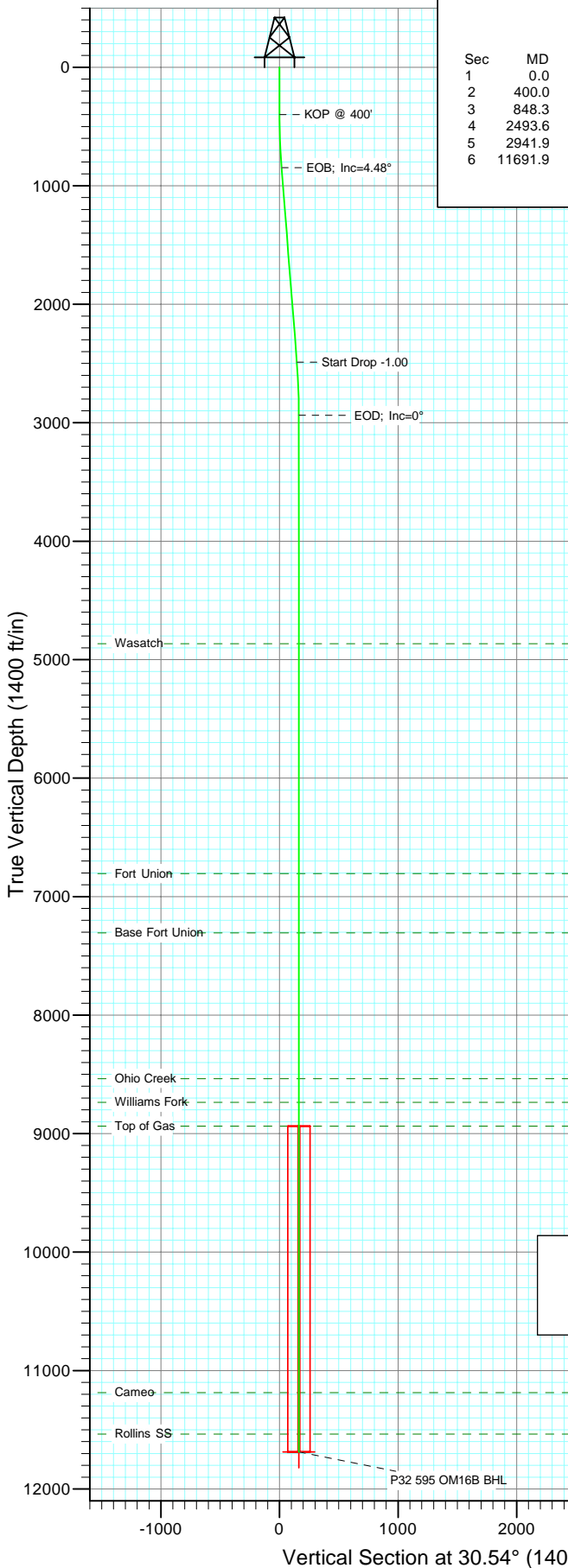


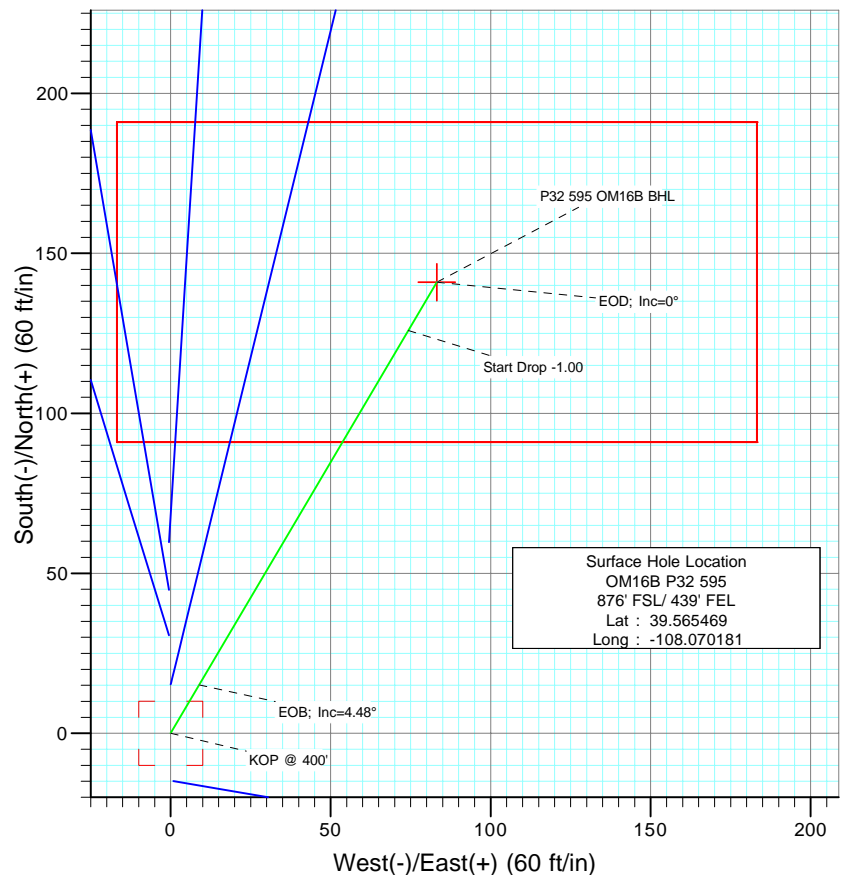


Berry Petroleum Company

Project: Garfield County
Site: P32 595
Well: OM16B 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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	848.3	4.48	30.54	847.9	15.1	8.9	1.00	30.54	17.5	
4	2493.6	4.48	30.54	2488.1	125.9	74.3	0.00	0.00	146.1	
5	2941.9	0.00	0.00	2936.0	141.0	83.2	1.00	180.00	163.7	
6	11691.9	0.00	0.00	11686.0	141.0	83.2	0.00	0.00	163.7	P32 595 OM16B BHL



Bottom Hole Location
OM16B P32 595
1016' FSL / 356' FEL
Lat : 39.565856
Long. : -108.069886

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4866.0	4871.9	Wasatch
6806.0	6811.9	Fort Union
7306.0	7311.9	Base Fort Union
8536.0	8541.9	Ohio Creek
8736.0	8741.9	Williams Fork
8936.0	8941.9	Top of Gas
11186.0	11191.9	Cameo
11536.0	11541.9	Rollins SS



Azimuths to True North
Magnetic North: 10.67°

Magnetic Field
Strength: 52516.8nT
Dip Angle: 65.85°
Date: 2/23/2009
Model: IGRF200510

DESIGN DETAILS: Plan #1

95xxx; LR
KB OM16B P32 @ 8386.0ft (Rig Name)

Target	Azimuth	Origin	N/S	E/W	From TVD
P32 595 OM16B BHL	30.54	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 OM16B P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM16B 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	OM16B P32 595					
Well Position	+N/-S	0.0 ft	Northing:	1,641,102.95 ft	Latitude:	39.565469
	+E/-W	0.0 ft	Easting:	2,275,510.80 ft	Longitude:	-108.070181
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	30.54

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
848.3	4.48	30.54	847.9	15.1	8.9	1.00	1.00	0.00	30.54	
2,493.6	4.48	30.54	2,488.1	125.9	74.3	0.00	0.00	0.00	0.00	
2,941.9	0.00	0.00	2,936.0	141.0	83.2	1.00	-1.00	0.00	180.00	
11,691.9	0.00	0.00	11,686.0	141.0	83.2	0.00	0.00	0.00	0.00	P32 595 OM16B BHL

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM16B P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM16B 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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400'
500.0	1.00	30.54	500.0	0.8	0.4	0.9	1.00	1.00	
600.0	2.00	30.54	600.0	3.0	1.8	3.5	1.00	1.00	
700.0	3.00	30.54	699.9	6.8	4.0	7.9	1.00	1.00	
800.0	4.00	30.54	799.7	12.0	7.1	14.0	1.00	1.00	
848.3	4.48	30.54	847.9	15.1	8.9	17.5	1.00	1.00	EOB; Inc=4.48°
900.0	4.48	30.54	899.4	18.6	11.0	21.6	0.00	0.00	
1,000.0	4.48	30.54	999.1	25.3	14.9	29.4	0.00	0.00	
1,100.0	4.48	30.54	1,098.8	32.0	18.9	37.2	0.00	0.00	
1,200.0	4.48	30.54	1,198.5	38.8	22.9	45.0	0.00	0.00	
1,300.0	4.48	30.54	1,298.2	45.5	26.8	52.8	0.00	0.00	
1,400.0	4.48	30.54	1,397.9	52.2	30.8	60.7	0.00	0.00	
1,500.0	4.48	30.54	1,497.5	59.0	34.8	68.5	0.00	0.00	
1,600.0	4.48	30.54	1,597.2	65.7	38.8	76.3	0.00	0.00	
1,700.0	4.48	30.54	1,696.9	72.4	42.7	84.1	0.00	0.00	
1,800.0	4.48	30.54	1,796.6	79.2	46.7	91.9	0.00	0.00	
1,900.0	4.48	30.54	1,896.3	85.9	50.7	99.7	0.00	0.00	
2,000.0	4.48	30.54	1,996.0	92.6	54.7	107.6	0.00	0.00	
2,100.0	4.48	30.54	2,095.7	99.4	58.6	115.4	0.00	0.00	
2,200.0	4.48	30.54	2,195.4	106.1	62.6	123.2	0.00	0.00	
2,300.0	4.48	30.54	2,295.1	112.8	66.6	131.0	0.00	0.00	
2,400.0	4.48	30.54	2,394.8	119.6	70.5	138.8	0.00	0.00	
2,493.6	4.48	30.54	2,488.1	125.9	74.3	146.1	0.00	0.00	Start Drop -1.00
2,500.0	4.42	30.54	2,494.5	126.3	74.5	146.6	1.00	-1.00	
2,600.0	3.42	30.54	2,594.3	132.2	78.0	153.5	1.00	-1.00	
2,700.0	2.42	30.54	2,694.1	136.6	80.6	158.6	1.00	-1.00	
2,800.0	1.42	30.54	2,794.1	139.5	82.3	161.9	1.00	-1.00	
2,900.0	0.42	30.54	2,894.1	140.8	83.1	163.5	1.00	-1.00	
2,941.9	0.00	0.00	2,936.0	141.0	83.2	163.7	1.00	-1.00	EOD; Inc=0°
3,000.0	0.00	0.00	2,994.1	141.0	83.2	163.7	0.00	0.00	
3,100.0	0.00	0.00	3,094.1	141.0	83.2	163.7	0.00	0.00	
3,200.0	0.00	0.00	3,194.1	141.0	83.2	163.7	0.00	0.00	
3,300.0	0.00	0.00	3,294.1	141.0	83.2	163.7	0.00	0.00	
3,400.0	0.00	0.00	3,394.1	141.0	83.2	163.7	0.00	0.00	
3,500.0	0.00	0.00	3,494.1	141.0	83.2	163.7	0.00	0.00	
3,600.0	0.00	0.00	3,594.1	141.0	83.2	163.7	0.00	0.00	
3,700.0	0.00	0.00	3,694.1	141.0	83.2	163.7	0.00	0.00	
3,800.0	0.00	0.00	3,794.1	141.0	83.2	163.7	0.00	0.00	
3,900.0	0.00	0.00	3,894.1	141.0	83.2	163.7	0.00	0.00	
4,000.0	0.00	0.00	3,994.1	141.0	83.2	163.7	0.00	0.00	
4,100.0	0.00	0.00	4,094.1	141.0	83.2	163.7	0.00	0.00	
4,200.0	0.00	0.00	4,194.1	141.0	83.2	163.7	0.00	0.00	
4,300.0	0.00	0.00	4,294.1	141.0	83.2	163.7	0.00	0.00	
4,400.0	0.00	0.00	4,394.1	141.0	83.2	163.7	0.00	0.00	
4,500.0	0.00	0.00	4,494.1	141.0	83.2	163.7	0.00	0.00	
4,600.0	0.00	0.00	4,594.1	141.0	83.2	163.7	0.00	0.00	
4,700.0	0.00	0.00	4,694.1	141.0	83.2	163.7	0.00	0.00	
4,800.0	0.00	0.00	4,794.1	141.0	83.2	163.7	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM16B P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM16B 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
4,871.9	0.00	0.00	4,866.0	141.0	83.2	163.7	0.00	0.00	Wasatch
4,900.0	0.00	0.00	4,894.1	141.0	83.2	163.7	0.00	0.00	
5,000.0	0.00	0.00	4,994.1	141.0	83.2	163.7	0.00	0.00	
5,100.0	0.00	0.00	5,094.1	141.0	83.2	163.7	0.00	0.00	
5,200.0	0.00	0.00	5,194.1	141.0	83.2	163.7	0.00	0.00	
5,300.0	0.00	0.00	5,294.1	141.0	83.2	163.7	0.00	0.00	
5,400.0	0.00	0.00	5,394.1	141.0	83.2	163.7	0.00	0.00	
5,500.0	0.00	0.00	5,494.1	141.0	83.2	163.7	0.00	0.00	
5,600.0	0.00	0.00	5,594.1	141.0	83.2	163.7	0.00	0.00	
5,700.0	0.00	0.00	5,694.1	141.0	83.2	163.7	0.00	0.00	
5,800.0	0.00	0.00	5,794.1	141.0	83.2	163.7	0.00	0.00	Fort Union
5,900.0	0.00	0.00	5,894.1	141.0	83.2	163.7	0.00	0.00	
6,000.0	0.00	0.00	5,994.1	141.0	83.2	163.7	0.00	0.00	
6,100.0	0.00	0.00	6,094.1	141.0	83.2	163.7	0.00	0.00	
6,200.0	0.00	0.00	6,194.1	141.0	83.2	163.7	0.00	0.00	
6,300.0	0.00	0.00	6,294.1	141.0	83.2	163.7	0.00	0.00	
6,400.0	0.00	0.00	6,394.1	141.0	83.2	163.7	0.00	0.00	
6,500.0	0.00	0.00	6,494.1	141.0	83.2	163.7	0.00	0.00	
6,600.0	0.00	0.00	6,594.1	141.0	83.2	163.7	0.00	0.00	
6,700.0	0.00	0.00	6,694.1	141.0	83.2	163.7	0.00	0.00	
6,800.0	0.00	0.00	6,794.1	141.0	83.2	163.7	0.00	0.00	Base Fort Union
6,811.9	0.00	0.00	6,806.0	141.0	83.2	163.7	0.00	0.00	
6,900.0	0.00	0.00	6,894.1	141.0	83.2	163.7	0.00	0.00	
7,000.0	0.00	0.00	6,994.1	141.0	83.2	163.7	0.00	0.00	
7,100.0	0.00	0.00	7,094.1	141.0	83.2	163.7	0.00	0.00	
7,200.0	0.00	0.00	7,194.1	141.0	83.2	163.7	0.00	0.00	
7,300.0	0.00	0.00	7,294.1	141.0	83.2	163.7	0.00	0.00	
7,311.9	0.00	0.00	7,306.0	141.0	83.2	163.7	0.00	0.00	
7,400.0	0.00	0.00	7,394.1	141.0	83.2	163.7	0.00	0.00	
7,500.0	0.00	0.00	7,494.1	141.0	83.2	163.7	0.00	0.00	Ohio Creek
7,600.0	0.00	0.00	7,594.1	141.0	83.2	163.7	0.00	0.00	
7,700.0	0.00	0.00	7,694.1	141.0	83.2	163.7	0.00	0.00	
7,800.0	0.00	0.00	7,794.1	141.0	83.2	163.7	0.00	0.00	
7,900.0	0.00	0.00	7,894.1	141.0	83.2	163.7	0.00	0.00	
8,000.0	0.00	0.00	7,994.1	141.0	83.2	163.7	0.00	0.00	
8,100.0	0.00	0.00	8,094.1	141.0	83.2	163.7	0.00	0.00	
8,200.0	0.00	0.00	8,194.1	141.0	83.2	163.7	0.00	0.00	
8,300.0	0.00	0.00	8,294.1	141.0	83.2	163.7	0.00	0.00	
8,400.0	0.00	0.00	8,394.1	141.0	83.2	163.7	0.00	0.00	Williams Fork
8,500.0	0.00	0.00	8,494.1	141.0	83.2	163.7	0.00	0.00	
8,541.9	0.00	0.00	8,536.0	141.0	83.2	163.7	0.00	0.00	
8,600.0	0.00	0.00	8,594.1	141.0	83.2	163.7	0.00	0.00	
8,700.0	0.00	0.00	8,694.1	141.0	83.2	163.7	0.00	0.00	
8,741.9	0.00	0.00	8,736.0	141.0	83.2	163.7	0.00	0.00	
8,800.0	0.00	0.00	8,794.1	141.0	83.2	163.7	0.00	0.00	
8,900.0	0.00	0.00	8,894.1	141.0	83.2	163.7	0.00	0.00	
8,941.9	0.00	0.00	8,936.0	141.0	83.2	163.7	0.00	0.00	
9,000.0	0.00	0.00	8,994.1	141.0	83.2	163.7	0.00	0.00	Top of Gas
9,100.0	0.00	0.00	9,094.1	141.0	83.2	163.7	0.00	0.00	
9,200.0	0.00	0.00	9,194.1	141.0	83.2	163.7	0.00	0.00	
9,300.0	0.00	0.00	9,294.1	141.0	83.2	163.7	0.00	0.00	
9,400.0	0.00	0.00	9,394.1	141.0	83.2	163.7	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM16B P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM16B 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	9,494.1	141.0	83.2	163.7	0.00	0.00	
9,600.0	0.00	0.00	9,594.1	141.0	83.2	163.7	0.00	0.00	
9,700.0	0.00	0.00	9,694.1	141.0	83.2	163.7	0.00	0.00	
9,800.0	0.00	0.00	9,794.1	141.0	83.2	163.7	0.00	0.00	
9,900.0	0.00	0.00	9,894.1	141.0	83.2	163.7	0.00	0.00	
10,000.0	0.00	0.00	9,994.1	141.0	83.2	163.7	0.00	0.00	
10,100.0	0.00	0.00	10,094.1	141.0	83.2	163.7	0.00	0.00	
10,200.0	0.00	0.00	10,194.1	141.0	83.2	163.7	0.00	0.00	
10,300.0	0.00	0.00	10,294.1	141.0	83.2	163.7	0.00	0.00	
10,400.0	0.00	0.00	10,394.1	141.0	83.2	163.7	0.00	0.00	
10,500.0	0.00	0.00	10,494.1	141.0	83.2	163.7	0.00	0.00	
10,600.0	0.00	0.00	10,594.1	141.0	83.2	163.7	0.00	0.00	
10,700.0	0.00	0.00	10,694.1	141.0	83.2	163.7	0.00	0.00	
10,800.0	0.00	0.00	10,794.1	141.0	83.2	163.7	0.00	0.00	
10,900.0	0.00	0.00	10,894.1	141.0	83.2	163.7	0.00	0.00	
11,000.0	0.00	0.00	10,994.1	141.0	83.2	163.7	0.00	0.00	
11,100.0	0.00	0.00	11,094.1	141.0	83.2	163.7	0.00	0.00	
11,191.9	0.00	0.00	11,186.0	141.0	83.2	163.7	0.00	0.00	Cameo
11,200.0	0.00	0.00	11,194.1	141.0	83.2	163.7	0.00	0.00	
11,300.0	0.00	0.00	11,294.1	141.0	83.2	163.7	0.00	0.00	
11,400.0	0.00	0.00	11,394.1	141.0	83.2	163.7	0.00	0.00	
11,500.0	0.00	0.00	11,494.1	141.0	83.2	163.7	0.00	0.00	
11,541.9	0.00	0.00	11,536.0	141.0	83.2	163.7	0.00	0.00	Rollins SS
11,600.0	0.00	0.00	11,594.1	141.0	83.2	163.7	0.00	0.00	
11,691.9	0.00	0.00	11,686.0	141.0	83.2	163.7	0.00	0.00	TD at 11691.9 - P32 595 OM16B BHL

Targets									
Target Name									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
P32 595 OM16B BHL	0.00	0.00	11,686.0	141.0	83.2	1,641,241.51	2,275,597.92	39.565856	-108.069886
- plan hits target center									
- Rectangle (sides W100.0 H200.0 D0.0)									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,871.9	4,866.0	Wasatch				
6,811.9	6,806.0	Fort Union				
7,311.9	7,306.0	Base Fort Union				
8,541.9	8,536.0	Ohio Creek				
8,741.9	8,736.0	Williams Fork				
8,941.9	8,936.0	Top of Gas				
11,191.9	11,186.0	Cameo				
11,541.9	11,536.0	Rollins SS				

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well OM16B P32 595
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Project:	Garfield County	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site:	P32 595	North Reference:	True
Well:	OM16B P32 595	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
400.0	400.0	0.0	0.0	KOP @ 400'
848.3	847.9	15.1	8.9	EOB; Inc=4.48°
2,493.6	2,488.1	125.9	74.3	Start Drop -1.00
2,941.9	2,936.0	141.0	83.2	EOD; Inc=0°
11,691.9	11,686.0	141.0	83.2	TD at 11691.9

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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	11,691.2	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	44.5	43.9	74.036	CC, ES
OM01A P32 595 - DD - Plan #1	500.0	494.4	60.4	58.8	36.854	SF
OM09B P32 595 - DD - Plan #1	200.0	200.0	59.7	59.1	99.500	CC, ES
OM09B P32 595 - DD - Plan #1	700.0	687.7	95.0	92.7	40.779	SF
OM09C P32 595 - DD - Plan #1	233.3	233.3	44.8	44.1	62.511	CC, ES
OM09C P32 595 - DD - Plan #1	1,100.0	1,091.6	98.3	94.5	25.716	SF
OM09D P32 595 - DD - Plan #1	300.0	300.0	30.6	29.6	32.226	CC, ES
OM09D P32 595 - DD - Plan #1	1,700.0	1,694.4	98.1	91.7	15.356	SF
OM13B P32 595 - DD - Plan #1	200.0	200.0	15.0	14.4	24.914	CC, ES
OM13B P32 595 - DD - Plan #1	400.0	399.4	17.9	16.6	13.714	SF
OM16A P32 595 - DD - Plan #1	333.4	333.4	15.3	14.2	14.352	CC
OM16A P32 595 - DD - Plan #1	400.0	399.9	15.5	14.2	11.946	ES
OM16A P32 595 - DD - Plan #1	2,500.0	2,498.3	48.4	38.4	4.849	SF
OM16D P32 595 - DD - Plan #1	400.0	400.0	30.2	28.9	23.291	CC, ES
OM16D P32 595 - DD - Plan #1	700.0	699.3	37.8	35.5	16.130	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 OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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				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	178.91	-44.4	0.8	44.5					
100.0	100.0	100.0	100.0	0.1	0.1	178.91	-44.4	0.8	44.5	44.2	0.25	176.863		
200.0	200.0	200.0	200.0	0.3	0.3	178.91	-44.4	0.8	44.5	43.9	0.60	74.036 CC, ES		
300.0	300.0	298.5	298.4	0.5	0.5	178.53	-46.1	1.2	46.1	45.2	0.95	48.711		
400.0	400.0	396.7	396.5	0.6	0.7	177.54	-51.1	2.2	51.2	49.9	1.30	39.518		
500.0	500.0	494.4	493.9	0.8	0.9	146.14	-59.3	3.9	60.4	58.8	1.64	36.854 SF		
600.0	600.0	591.2	590.0	1.0	1.1	145.88	-70.6	6.2	74.4	72.4	1.98	37.482		
700.0	699.9	689.8	687.6	1.2	1.4	146.14	-83.6	8.8	91.3	89.0	2.33	39.129		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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	-0.54	59.7	-0.6	59.7					
100.0	100.0	100.0	100.0	0.1	0.1	-0.54	59.7	-0.6	59.7	59.5	0.25	237.695		
200.0	200.0	200.0	200.0	0.3	0.3	-0.54	59.7	-0.6	59.7	59.1	0.60	99.500 CC, ES		
300.0	300.0	297.9	297.9	0.5	0.5	-0.43	61.4	-0.5	61.4	60.5	0.95	64.878		
400.0	400.0	395.6	395.5	0.6	0.7	-0.13	66.4	-0.1	66.6	65.3	1.30	51.248		
500.0	500.0	492.9	492.4	0.8	0.9	-30.55	74.7	0.4	74.3	72.7	1.64	45.424		
600.0	600.0	589.8	588.6	1.0	1.1	-30.88	86.2	1.1	83.9	82.0	1.98	42.369		
700.0	699.9	687.7	685.4	1.2	1.4	-31.54	100.7	2.0	95.0	92.7	2.33	40.779 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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 - OM09C 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 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	-0.72	44.8	-0.6	44.8					
100.0	100.0	100.0	100.0	0.1	0.1	-0.72	44.8	-0.6	44.8	44.6	0.25	178.277		
200.0	200.0	200.0	200.0	0.3	0.3	-0.72	44.8	-0.6	44.8	44.2	0.60	74.628		
233.3	233.3	233.3	233.3	0.4	0.4	-0.72	44.8	-0.6	44.8	44.1	0.72	62.511	CC, ES	
300.0	300.0	299.2	299.2	0.5	0.5	-0.80	45.2	-0.6	45.2	44.3	0.95	47.704		
400.0	400.0	397.6	397.5	0.6	0.7	-1.42	48.5	-1.2	48.6	47.3	1.30	37.534		
500.0	500.0	495.6	495.3	0.8	0.9	-33.41	55.2	-2.3	54.7	53.1	1.64	33.336		
600.0	600.0	593.3	592.5	1.0	1.1	-35.74	65.1	-4.0	62.8	60.8	1.99	31.587		
700.0	699.9	692.9	691.3	1.2	1.3	-38.47	76.8	-6.0	71.3	68.9	2.34	30.478		
800.0	799.7	792.5	790.2	1.4	1.6	-41.44	88.6	-8.0	78.6	75.9	2.70	29.155		
900.0	899.4	892.2	889.2	1.6	1.9	-44.63	100.4	-10.0	85.1	82.0	3.06	27.764		
1,000.0	999.1	991.9	988.2	1.8	2.1	-47.47	112.2	-12.0	91.6	88.2	3.44	26.629		
1,100.0	1,098.8	1,091.6	1,087.2	2.0	2.4	-49.93	124.0	-14.0	98.3	94.5	3.82	25.716	SF	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-1.06	30.6	-0.6	30.6					
100.0	100.0	100.0	100.0	0.1	0.1	-1.06	30.6	-0.6	30.6	30.3	0.25	121.744		
200.0	200.0	200.0	200.0	0.3	0.3	-1.06	30.6	-0.6	30.6	30.0	0.60	50.963		
300.0	300.0	300.0	300.0	0.5	0.5	-1.06	30.6	-0.6	30.6	29.6	0.95	32.226 CC, ES		
400.0	400.0	398.9	398.9	0.6	0.6	-1.89	32.2	-1.1	32.3	31.0	1.30	24.876		
500.0	500.0	497.7	497.5	0.8	0.8	-35.23	37.1	-2.6	36.6	34.9	1.64	22.233		
600.0	600.0	596.8	596.3	1.0	1.0	-39.56	44.9	-4.9	42.5	40.5	1.99	21.334		
700.0	699.9	696.6	695.8	1.2	1.3	-44.28	53.0	-7.4	47.8	45.5	2.35	20.387		
800.0	799.7	796.4	795.2	1.4	1.5	-49.46	61.2	-10.0	52.3	49.6	2.71	19.301		
900.0	899.4	896.2	894.6	1.6	1.7	-55.05	69.4	-12.5	56.2	53.1	3.08	18.222		
1,000.0	999.1	996.0	994.0	1.8	1.9	-60.06	77.6	-15.0	60.5	57.0	3.47	17.420		
1,100.0	1,098.8	1,095.8	1,093.4	2.0	2.2	-64.38	85.8	-17.5	65.1	61.3	3.87	16.835		
1,200.0	1,198.5	1,195.5	1,192.8	2.2	2.4	-68.10	94.0	-20.0	70.1	65.8	4.28	16.400		
1,300.0	1,298.2	1,295.3	1,292.2	2.4	2.6	-71.32	102.2	-22.5	75.4	70.7	4.69	16.072		
1,400.0	1,397.9	1,395.1	1,391.7	2.6	2.8	-74.11	110.3	-25.0	80.8	75.7	5.11	15.821		
1,500.0	1,497.5	1,494.9	1,491.1	2.9	3.1	-76.55	118.5	-27.5	86.4	80.9	5.53	15.627		
1,600.0	1,597.2	1,594.7	1,590.5	3.1	3.3	-78.68	126.7	-30.0	92.2	86.3	5.96	15.476		
1,700.0	1,696.9	1,694.4	1,689.9	3.3	3.5	-80.57	134.9	-32.6	98.1	91.7	6.39	15.356 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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							
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	176.76	-14.9	0.8	15.0				
100.0	100.0	100.0	100.0	0.1	0.1	176.76	-14.9	0.8	15.0	14.7	0.25	59.516	
200.0	200.0	200.0	200.0	0.3	0.3	176.76	-14.9	0.8	15.0	14.4	0.60	24.914 CC, ES	
300.0	300.0	299.8	299.8	0.5	0.5	170.45	-15.2	2.6	15.4	14.5	0.95	16.241	
400.0	400.0	399.4	399.3	0.6	0.7	154.48	-16.1	7.7	17.9	16.6	1.30	13.714 SF	
500.0	500.0	499.2	498.8	0.8	0.9	111.05	-17.3	14.7	23.1	21.4	1.67	13.790	
600.0	600.0	599.0	598.3	1.0	1.1	106.41	-18.5	21.8	29.4	27.4	2.03	14.482	
700.0	699.9	698.7	697.8	1.2	1.3	106.09	-19.7	28.8	36.4	34.0	2.40	15.137	
800.0	799.7	798.4	797.2	1.4	1.5	108.04	-20.9	35.9	43.8	41.0	2.79	15.717	
900.0	899.4	898.1	896.6	1.6	1.7	111.02	-22.1	42.9	51.8	48.7	3.19	16.269	
1,000.0	999.1	997.7	996.0	1.8	1.9	113.40	-23.3	50.0	60.0	56.5	3.59	16.730	
1,100.0	1,098.8	1,097.3	1,095.4	2.0	2.1	115.21	-24.5	57.0	68.3	64.3	3.99	17.109	
1,200.0	1,198.5	1,197.0	1,194.8	2.2	2.4	116.63	-25.7	64.1	76.6	72.3	4.40	17.426	
1,300.0	1,298.2	1,296.6	1,294.1	2.4	2.6	117.76	-26.9	71.1	85.0	80.2	4.80	17.694	
1,400.0	1,397.9	1,396.3	1,393.5	2.6	2.8	118.70	-28.2	78.2	93.4	88.2	5.21	17.923	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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	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	0.00	15.3	0.0	15.3					
100.0	100.0	100.0	100.0	0.1	0.1	0.00	15.3	0.0	15.3	15.0	0.25	60.870		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	15.3	0.0	15.3	14.7	0.60	25.481		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	15.3	0.0	15.3	14.3	0.95	16.113		
333.4	333.4	333.4	333.4	0.5	0.5	0.00	15.3	0.0	15.3	14.2	1.07	14.352 CC		
400.0	400.0	399.9	399.9	0.6	0.6	0.19	15.5	0.1	15.5	14.2	1.30	11.946 ES		
500.0	500.0	499.6	499.6	0.8	0.8	-30.46	17.2	0.5	16.4	14.8	1.65	9.987		
600.0	600.0	599.3	599.2	1.0	1.0	-32.09	20.6	1.3	17.6	15.6	2.00	8.805		
700.0	699.9	699.0	698.8	1.2	1.2	-34.92	25.6	2.5	18.9	16.6	2.35	8.061		
800.0	799.7	798.8	798.3	1.4	1.4	-38.70	32.3	4.2	20.5	17.8	2.71	7.561		
900.0	899.4	898.7	898.0	1.6	1.6	-44.23	39.3	5.9	21.4	18.3	3.09	6.922		
1,000.0	999.1	998.7	997.7	1.8	1.8	-49.67	46.3	7.6	22.3	18.8	3.48	6.410		
1,100.0	1,098.8	1,098.7	1,097.4	2.0	2.0	-54.65	53.4	9.3	23.4	19.5	3.88	6.029		
1,200.0	1,198.5	1,198.6	1,197.1	2.2	2.2	-59.14	60.4	11.0	24.7	20.4	4.30	5.743		
1,300.0	1,298.2	1,298.6	1,296.9	2.4	2.4	-63.17	67.4	12.8	26.1	21.4	4.72	5.526		
1,400.0	1,397.9	1,398.6	1,396.6	2.6	2.6	-66.78	74.4	14.5	27.6	22.5	5.15	5.360		
1,500.0	1,497.5	1,498.6	1,496.3	2.9	2.9	-69.99	81.5	16.2	29.2	23.6	5.58	5.234		
1,600.0	1,597.2	1,598.5	1,596.0	3.1	3.1	-72.86	88.5	17.9	30.9	24.9	6.02	5.137		
1,700.0	1,696.9	1,698.5	1,695.7	3.3	3.3	-75.43	95.5	19.6	32.7	26.2	6.46	5.062		
1,800.0	1,796.6	1,798.5	1,795.4	3.5	3.5	-77.73	102.6	21.4	34.5	27.6	6.90	5.004		
1,900.0	1,896.3	1,898.5	1,895.1	3.7	3.7	-79.79	109.6	23.1	36.4	29.1	7.34	4.960		
2,000.0	1,996.0	1,998.4	1,994.8	4.0	3.9	-81.65	116.6	24.8	38.3	30.5	7.78	4.926		
2,100.0	2,095.7	2,098.4	2,094.6	4.2	4.1	-83.33	123.7	26.5	40.3	32.1	8.22	4.900		
2,200.0	2,195.4	2,198.4	2,194.3	4.4	4.3	-84.86	130.7	28.2	42.3	33.6	8.66	4.881		
2,300.0	2,295.1	2,298.4	2,294.0	4.6	4.6	-86.24	137.7	30.0	44.3	35.2	9.10	4.867		
2,400.0	2,394.8	2,398.3	2,393.7	4.8	4.8	-87.51	144.7	31.7	46.3	36.8	9.54	4.856		
2,500.0	2,494.5	2,498.3	2,493.4	5.1	5.0	-88.66	151.8	33.4	48.4	38.4	9.98	4.849 SF		
2,600.0	2,594.3	2,598.3	2,593.1	5.3	5.2	-88.63	158.8	35.1	50.5	40.1	10.39	4.858		
2,700.0	2,694.1	2,698.2	2,692.8	5.4	5.4	-86.70	165.8	36.8	52.6	41.9	10.77	4.887		
2,800.0	2,794.1	2,798.2	2,792.5	5.6	5.6	-83.12	172.9	38.6	55.0	43.9	11.11	4.953		
2,900.0	2,894.1	2,898.0	2,892.0	5.8	5.8	-78.17	179.9	40.3	58.0	46.6	11.40	5.083		
3,000.0	2,994.1	2,997.7	2,991.5	5.9	6.1	-41.88	186.9	42.0	61.7	50.1	11.65	5.297		
3,100.0	3,094.1	3,097.5	3,091.0	6.1	6.3	-36.71	193.9	43.7	66.1	54.2	11.89	5.558		
3,200.0	3,194.1	3,197.2	3,190.5	6.2	6.5	-32.20	200.9	45.4	70.9	58.8	12.13	5.846		
3,300.0	3,294.1	3,297.0	3,290.0	6.4	6.7	-28.28	207.9	47.1	76.1	63.8	12.38	6.150		
3,400.0	3,394.1	3,396.7	3,389.4	6.5	6.9	-24.89	214.9	48.9	81.7	69.0	12.64	6.462		
3,500.0	3,494.1	3,496.4	3,488.9	6.7	7.1	-21.93	222.0	50.6	87.5	74.5	12.91	6.776		
3,600.0	3,594.1	3,596.2	3,588.4	6.9	7.3	-19.34	229.0	52.3	93.4	80.3	13.18	7.087		
3,700.0	3,694.1	3,695.9	3,687.9	7.0	7.6	-17.06	236.0	54.0	99.6	86.1	13.47	7.394		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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												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	178.40	-30.2	0.8	30.2					
100.0	100.0	100.0	100.0	0.1	0.1	178.40	-30.2	0.8	30.2	30.0	0.25	120.339		
200.0	200.0	200.0	200.0	0.3	0.3	178.40	-30.2	0.8	30.2	29.6	0.60	50.374		
300.0	300.0	300.0	300.0	0.5	0.5	178.40	-30.2	0.8	30.2	29.3	0.95	31.854		
400.0	400.0	400.0	400.0	0.6	0.6	178.40	-30.2	0.8	30.2	28.9	1.30	23.291	CC, ES	
500.0	500.0	500.0	500.0	0.8	0.8	148.71	-30.2	0.8	31.0	29.3	1.65	18.807		
600.0	600.0	600.0	600.0	1.0	1.0	151.05	-30.2	0.8	33.3	31.3	2.00	16.651		
700.0	699.9	699.3	699.3	1.2	1.2	153.52	-31.0	1.3	37.8	35.5	2.35	16.130	SF	
800.0	799.7	798.4	798.4	1.4	1.3	155.07	-33.2	2.6	45.5	42.8	2.70	16.863		
900.0	899.4	897.2	897.1	1.6	1.5	155.74	-36.9	4.7	55.9	52.8	3.05	18.323		
1,000.0	999.1	995.6	995.3	1.8	1.7	155.42	-42.0	7.7	67.8	64.4	3.41	19.913		
1,100.0	1,098.8	1,094.7	1,094.1	2.0	1.9	154.76	-48.1	11.2	80.6	76.9	3.77	21.400		
1,200.0	1,198.5	1,193.9	1,193.1	2.2	2.1	154.28	-54.2	14.7	93.4	89.3	4.13	22.619		

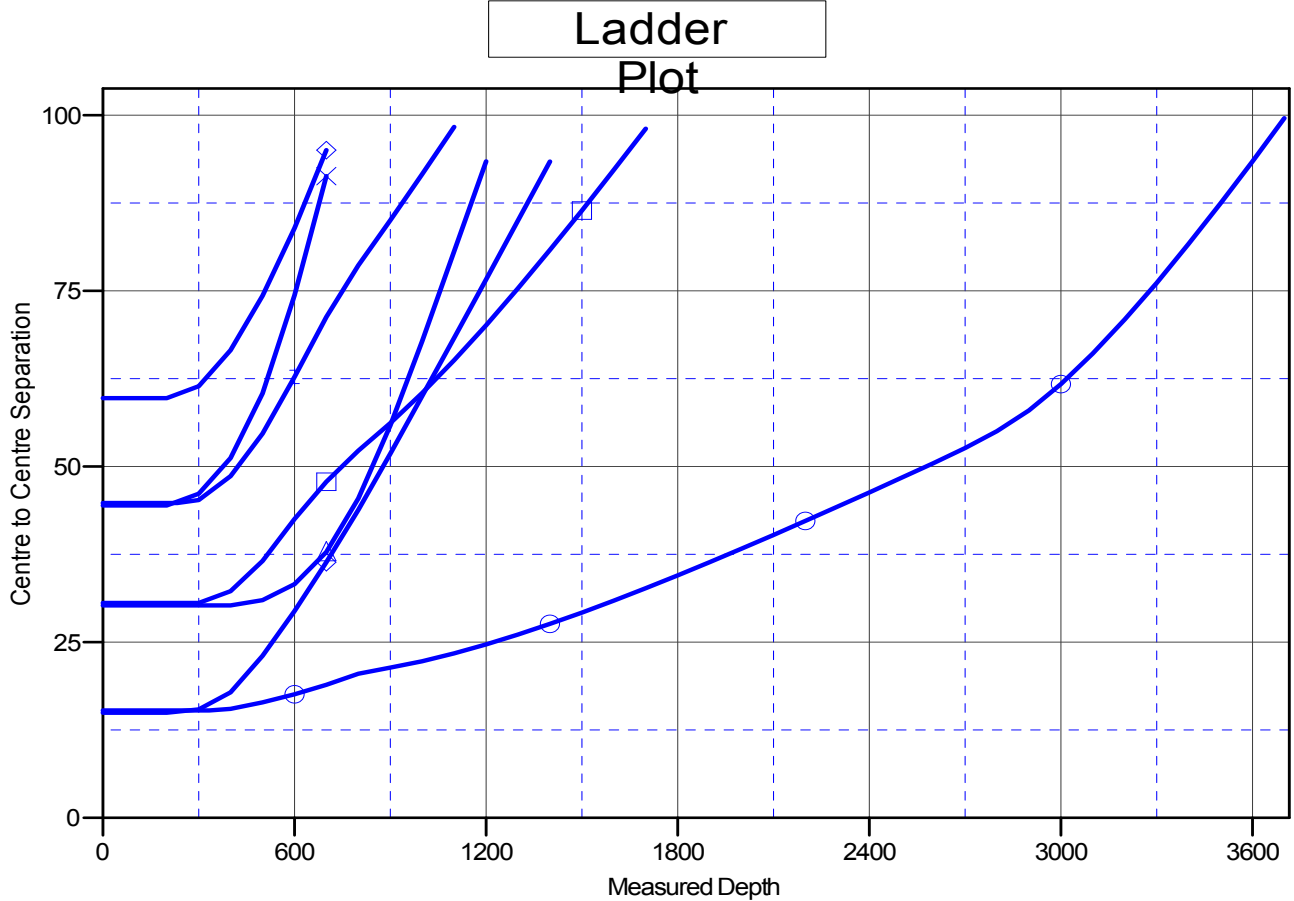
Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well OM16B P32 595
Project:	Garfield County	TVD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Reference Site:	P32 595	MD Reference:	KB OM16B P32 @ 8386.0ft (Rig Name)
Site Error:	0.0ft	North Reference:	True
Reference Well:	OM16B 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 OM16B P32 @ 8386.0ft (Rig Nam
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: OM16B 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
- ◆ OM09B P32 595, DD, Plan#1 V0
- ✕ OM01A P32 595, DD, Plan#1 V0
- ▲ OM16D P32 595, DD, Plan#1 V0
- ✱ OM09C P32 595, DD, Plan#1 V0
- ⊠ OM09D P32 595, DD, Plan#1 V0
- ⊙ OM16A P32 595, DD, Plan#1 V0