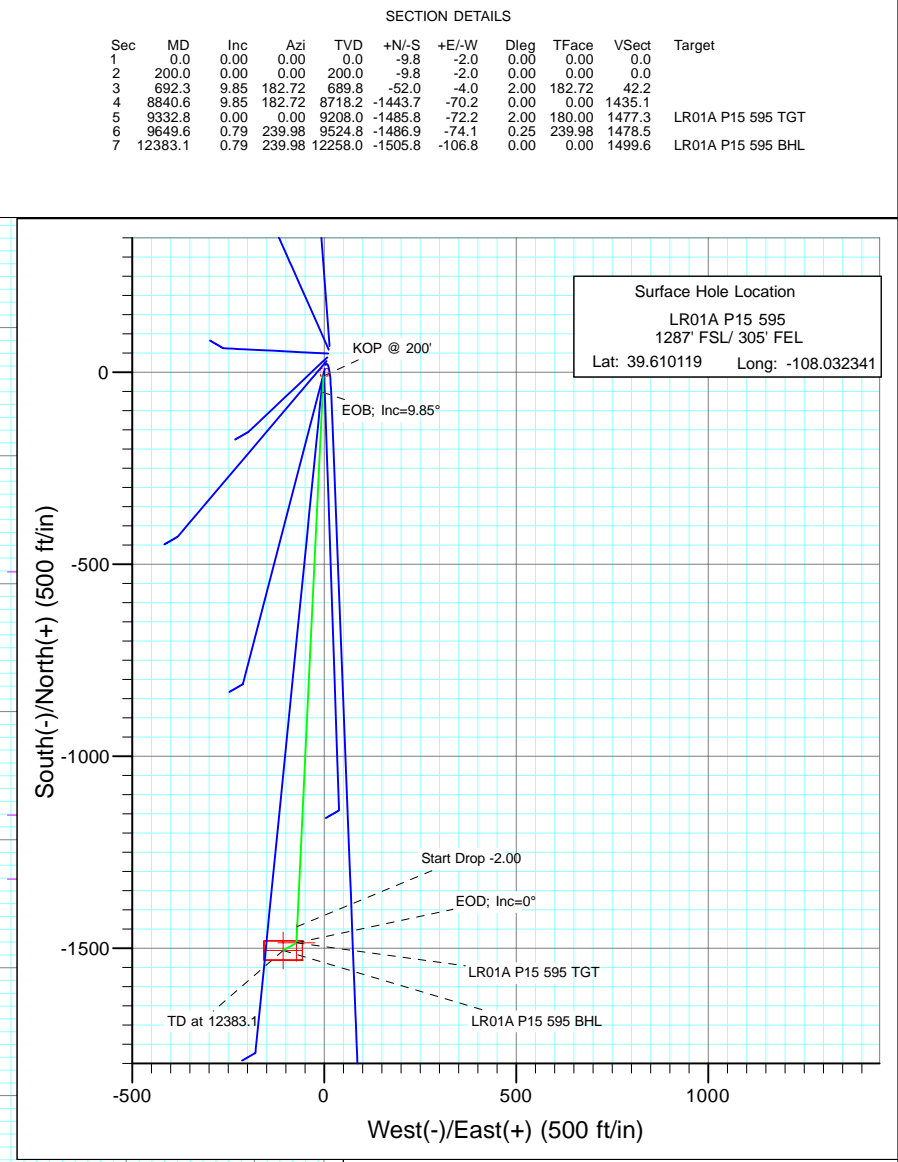
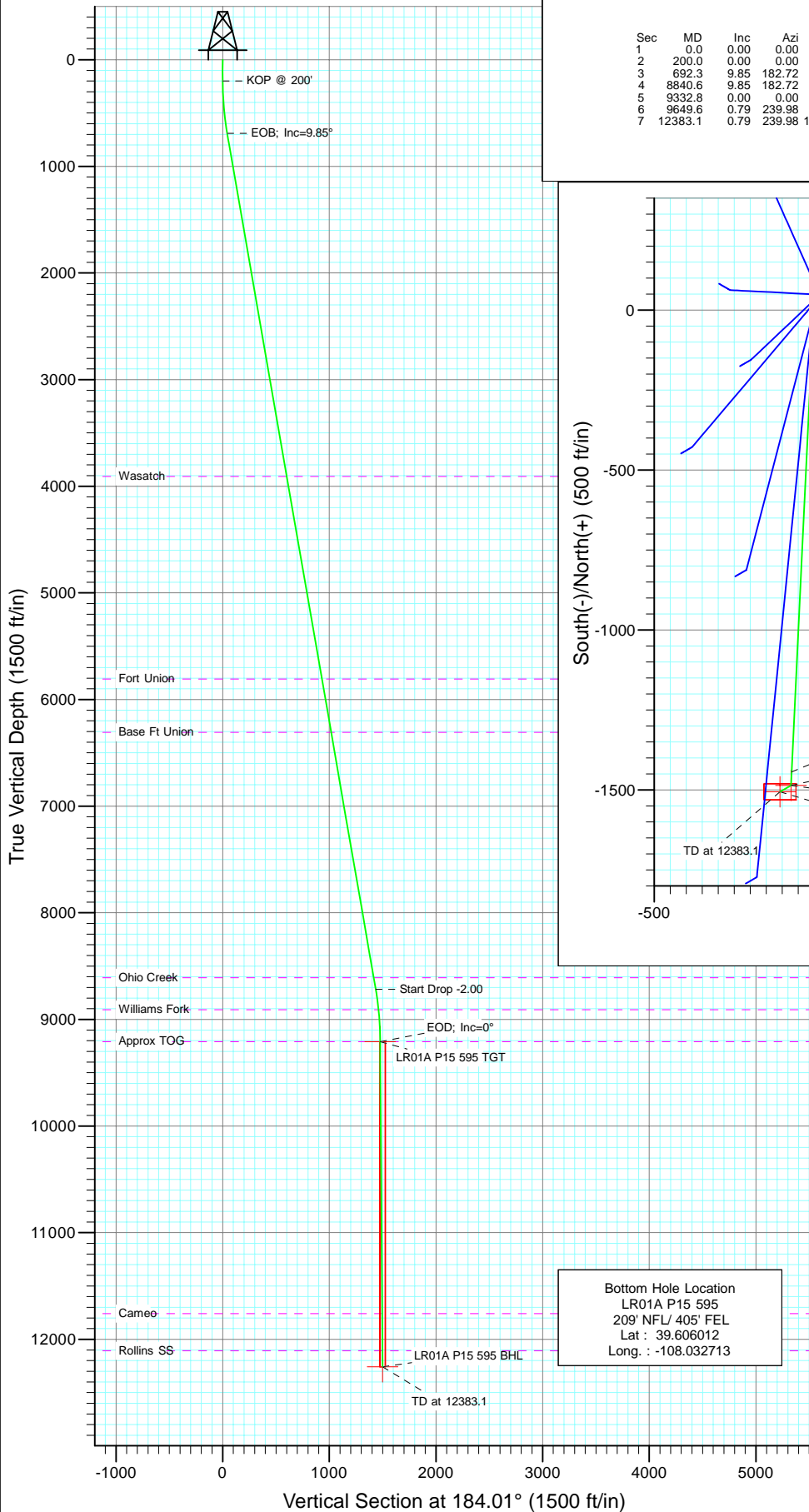




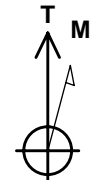
Project: Garfield County
Site: SESE S15-T5S-R95W (P15 595)
Well: LR01A P15 595
Wellbore: DD
Design: Plan #1



Bottom Hole Location
LR01A P15 595
209' NFL/ 405' FEL
Lat : 39.606012
Long. : -108.032713

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	-9.8	-2.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	-9.8	-2.0	0.00	0.00	0.0	
3	692.3	9.85	182.72	689.8	-52.0	-4.0	2.00	182.72	42.2	
4	8840.6	9.85	182.72	8718.2	-1443.7	-70.2	0.00	0.00	1435.1	
5	9332.8	0.00	0.00	9208.0	-1485.8	-72.2	2.00	180.00	1477.3	LR01A P15 595 TGT
6	9649.6	0.79	239.98	9524.8	-1486.9	-74.1	0.25	239.98	1478.5	
7	12383.1	0.79	239.98	12258.0	-1505.8	-106.8	0.00	0.00	1499.6	LR01A P15 595 BHL

Surface Hole Location
LR01A P15 595
1287' FSL/ 305' FEL
Lat: 39.610119 Long: -108.032341



Azimuths to True North
Magnetic North: 10.45°

Magnetic Field
Strength: 52392.6snT
Dip Angle: 65.86°
Date: 9/21/2010
Model: IGRF200510

FORMATION TOP DETAILS		
TVDPPath	MDPath	Formation
3908.0	3958.5	Wasatch
5808.0	5886.9	Fort Union
6308.0	6394.4	Base Ft Union
8608.0	8728.8	Ohio Creek
8908.0	9032.3	Williams Fork
9208.0	9332.8	Approx TOG
11758.0	11883.1	Cameo
12108.0	12233.1	Rollins SS

DESIGN DETAILS: Plan #1				
105XXX; BH				
KBE @ 8400.0ft (Patterson 302)				
Target	Azimuth	Origin	N/S	E/W From TVD
LR01A P15 595 BHL	184.01	Slot	-9.8	-2.0 0.0

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Project:	Garfield County	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site:	SESE S15-T5S-R95W (P15 595)	North Reference:	True
Well:	LR01A P15 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		SESE S15-T5S-R95W (P15 595)			
Site Position:		Northing:	1,657,070.66 ft	Latitude:	39.610146
From:	Lat/Long	Easting:	2,286,630.08 ft	Longitude:	-108.032334
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.60 °

Well	LR01A P15 595					
Well Position	+N/-S	-9.8 ft	Northing:	1,657,060.87 ft	Latitude:	39.610119
	+E/-W	-2.0 ft	Easting:	2,286,627.83 ft	Longitude:	-108.032341
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,385.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/21/2010	10.45	65.86	52,393

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	-9.8	-2.0	0.00	

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	-9.8	-2.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	-9.8	-2.0	0.00	0.00	0.00	0.00	
692.3	9.85	182.72	689.8	-52.0	-4.0	2.00	2.00	0.00	182.72	
8,840.6	9.85	182.72	8,718.2	-1,443.7	-70.2	0.00	0.00	0.00	0.00	
9,332.8	0.00	0.00	9,208.0	-1,485.8	-72.2	2.00	-2.00	0.00	180.00	LR01A P15 595 TGT
9,649.6	0.79	239.98	9,524.8	-1,486.9	-74.1	0.25	0.25	-37.89	239.98	
12,383.1	0.79	239.98	12,258.0	-1,505.8	-106.8	0.00	0.00	0.00	0.00	LR01A P15 595 BHL

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Project:	Garfield County	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site:	SESE S15-T5S-R95W (P15 595)	North Reference:	True
Well:	LR01A P15 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	-9.8	-2.0	0.0	0.00	0.00	
30.0	0.00	0.00	30.0	-9.8	-2.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	-9.8	-2.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	-9.8	-2.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	-9.8	-2.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	-9.8	-2.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	-9.8	-2.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	-9.8	-2.0	0.0	0.00	0.00	KOP @ 200'
210.0	0.20	182.72	210.0	-9.9	-2.0	0.0	2.00	2.00	
240.0	0.80	182.72	240.0	-10.1	-2.0	-0.3	2.00	2.00	
270.0	1.40	182.72	270.0	-10.7	-2.0	-0.9	2.00	2.00	
300.0	2.00	182.72	300.0	-11.6	-2.1	-1.7	2.00	2.00	
330.0	2.60	182.72	330.0	-12.8	-2.1	-2.9	2.00	2.00	
360.0	3.20	182.72	359.9	-14.3	-2.2	-4.5	2.00	2.00	
390.0	3.80	182.72	389.9	-16.1	-2.3	-6.3	2.00	2.00	
420.0	4.40	182.72	419.8	-18.3	-2.4	-8.4	2.00	2.00	
450.0	5.00	182.72	449.7	-20.7	-2.5	-10.9	2.00	2.00	
480.0	5.60	182.72	479.6	-23.5	-2.6	-13.7	2.00	2.00	
510.0	6.20	182.72	509.4	-26.6	-2.8	-16.7	2.00	2.00	
540.0	6.80	182.72	539.2	-30.0	-2.9	-20.1	2.00	2.00	
570.0	7.40	182.72	569.0	-33.7	-3.1	-23.8	2.00	2.00	
600.0	8.00	182.72	598.7	-37.7	-3.3	-27.8	2.00	2.00	
630.0	8.60	182.72	628.4	-42.0	-3.5	-32.2	2.00	2.00	
660.0	9.20	182.72	658.0	-46.7	-3.7	-36.8	2.00	2.00	
690.0	9.80	182.72	687.6	-51.6	-4.0	-41.8	2.00	2.00	
692.3	9.85	182.72	689.8	-52.0	-4.0	-42.1	2.00	2.00	EOB; Inc=9.85°
720.0	9.85	182.72	717.2	-56.7	-4.2	-46.9	0.00	0.00	
750.0	9.85	182.72	746.7	-61.9	-4.4	-52.0	0.00	0.00	
780.0	9.85	182.72	776.3	-67.0	-4.7	-57.1	0.00	0.00	
810.0	9.85	182.72	805.8	-72.1	-4.9	-62.3	0.00	0.00	
840.0	9.85	182.72	835.4	-77.2	-5.2	-67.4	0.00	0.00	
870.0	9.85	182.72	865.0	-82.3	-5.4	-72.5	0.00	0.00	
900.0	9.85	182.72	894.5	-87.5	-5.7	-77.6	0.00	0.00	
930.0	9.85	182.72	924.1	-92.6	-5.9	-82.7	0.00	0.00	
960.0	9.85	182.72	953.6	-97.7	-6.2	-87.9	0.00	0.00	
990.0	9.85	182.72	983.2	-102.8	-6.4	-93.0	0.00	0.00	
1,020.0	9.85	182.72	1,012.8	-108.0	-6.6	-98.1	0.00	0.00	
1,050.0	9.85	182.72	1,042.3	-113.1	-6.9	-103.2	0.00	0.00	
1,080.0	9.85	182.72	1,071.9	-118.2	-7.1	-108.4	0.00	0.00	
1,110.0	9.85	182.72	1,101.4	-123.3	-7.4	-113.5	0.00	0.00	
1,140.0	9.85	182.72	1,131.0	-128.5	-7.6	-118.6	0.00	0.00	
1,170.0	9.85	182.72	1,160.5	-133.6	-7.9	-123.7	0.00	0.00	
1,200.0	9.85	182.72	1,190.1	-138.7	-8.1	-128.9	0.00	0.00	
1,230.0	9.85	182.72	1,219.7	-143.8	-8.3	-134.0	0.00	0.00	
1,260.0	9.85	182.72	1,249.2	-149.0	-8.6	-139.1	0.00	0.00	
1,290.0	9.85	182.72	1,278.8	-154.1	-8.8	-144.2	0.00	0.00	
1,320.0	9.85	182.72	1,308.3	-159.2	-9.1	-149.4	0.00	0.00	
1,350.0	9.85	182.72	1,337.9	-164.3	-9.3	-154.5	0.00	0.00	
1,380.0	9.85	182.72	1,367.5	-169.5	-9.6	-159.6	0.00	0.00	
1,410.0	9.85	182.72	1,397.0	-174.6	-9.8	-164.7	0.00	0.00	
1,440.0	9.85	182.72	1,426.6	-179.7	-10.1	-169.9	0.00	0.00	
1,470.0	9.85	182.72	1,456.1	-184.8	-10.3	-175.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Project:	Garfield County	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site:	SESE S15-T5S-R95W (P15 595)	North Reference:	True
Well:	LR01A P15 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
1,500.0	9.85	182.72	1,485.7	-189.9	-10.5	-180.1	0.00	0.00	
1,530.0	9.85	182.72	1,515.2	-195.1	-10.8	-185.2	0.00	0.00	
1,560.0	9.85	182.72	1,544.8	-200.2	-11.0	-190.3	0.00	0.00	
1,590.0	9.85	182.72	1,574.4	-205.3	-11.3	-195.5	0.00	0.00	
1,620.0	9.85	182.72	1,603.9	-210.4	-11.5	-200.6	0.00	0.00	
1,650.0	9.85	182.72	1,633.5	-215.6	-11.8	-205.7	0.00	0.00	
1,680.0	9.85	182.72	1,663.0	-220.7	-12.0	-210.8	0.00	0.00	
1,710.0	9.85	182.72	1,692.6	-225.8	-12.2	-216.0	0.00	0.00	
1,740.0	9.85	182.72	1,722.2	-230.9	-12.5	-221.1	0.00	0.00	
1,770.0	9.85	182.72	1,751.7	-236.1	-12.7	-226.2	0.00	0.00	
1,800.0	9.85	182.72	1,781.3	-241.2	-13.0	-231.3	0.00	0.00	
1,830.0	9.85	182.72	1,810.8	-246.3	-13.2	-236.5	0.00	0.00	
1,860.0	9.85	182.72	1,840.4	-251.4	-13.5	-241.6	0.00	0.00	
1,890.0	9.85	182.72	1,869.9	-256.6	-13.7	-246.7	0.00	0.00	
1,920.0	9.85	182.72	1,899.5	-261.7	-14.0	-251.8	0.00	0.00	
1,950.0	9.85	182.72	1,929.1	-266.8	-14.2	-257.0	0.00	0.00	
1,980.0	9.85	182.72	1,958.6	-271.9	-14.4	-262.1	0.00	0.00	
2,010.0	9.85	182.72	1,988.2	-277.1	-14.7	-267.2	0.00	0.00	
2,040.0	9.85	182.72	2,017.7	-282.2	-14.9	-272.3	0.00	0.00	
2,070.0	9.85	182.72	2,047.3	-287.3	-15.2	-277.5	0.00	0.00	
2,100.0	9.85	182.72	2,076.8	-292.4	-15.4	-282.6	0.00	0.00	
2,130.0	9.85	182.72	2,106.4	-297.5	-15.7	-287.7	0.00	0.00	
2,160.0	9.85	182.72	2,136.0	-302.7	-15.9	-292.8	0.00	0.00	
2,190.0	9.85	182.72	2,165.5	-307.8	-16.1	-297.9	0.00	0.00	
2,220.0	9.85	182.72	2,195.1	-312.9	-16.4	-303.1	0.00	0.00	
2,250.0	9.85	182.72	2,224.6	-318.0	-16.6	-308.2	0.00	0.00	
2,280.0	9.85	182.72	2,254.2	-323.2	-16.9	-313.3	0.00	0.00	
2,310.0	9.85	182.72	2,283.8	-328.3	-17.1	-318.4	0.00	0.00	
2,340.0	9.85	182.72	2,313.3	-333.4	-17.4	-323.6	0.00	0.00	
2,370.0	9.85	182.72	2,342.9	-338.5	-17.6	-328.7	0.00	0.00	
2,400.0	9.85	182.72	2,372.4	-343.7	-17.9	-333.8	0.00	0.00	
2,430.0	9.85	182.72	2,402.0	-348.8	-18.1	-338.9	0.00	0.00	
2,460.0	9.85	182.72	2,431.5	-353.9	-18.3	-344.1	0.00	0.00	
2,490.0	9.85	182.72	2,461.1	-359.0	-18.6	-349.2	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									
LR01A P15 595 BHL	0.00	0.00	12,258.0	-1,505.8	-106.8	1,655,568.40	2,286,481.37	39.606012	-108.032713
- plan misses target center by 9864.2ft at 2490.0ft MD (2461.1 TVD, -359.0 N, -18.6 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
LR01A P15 595 TGT	0.00	0.00	9,208.0	-1,485.8	-72.2	1,655,587.42	2,286,516.52	39.606067	-108.032590
- plan misses target center by 6840.5ft at 2490.0ft MD (2461.1 TVD, -359.0 N, -18.6 E)									
- Point									

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Project:	Garfield County	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site:	SESE S15-T5S-R95W (P15 595)	North Reference:	True
Well:	LR01A P15 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
2,500.0	9.85	182.72	2,471.0	-360.7	-18.7	-350.9	0.00	0.00	
2,600.0	9.85	182.72	2,569.5	-377.8	-19.5	-368.0	0.00	0.00	
2,700.0	9.85	182.72	2,668.0	-394.9	-20.3	-385.1	0.00	0.00	
2,800.0	9.85	182.72	2,766.5	-412.0	-21.1	-402.1	0.00	0.00	
2,900.0	9.85	182.72	2,865.1	-429.1	-21.9	-419.2	0.00	0.00	
3,000.0	9.85	182.72	2,963.6	-446.1	-22.7	-436.3	0.00	0.00	
3,100.0	9.85	182.72	3,062.1	-463.2	-23.5	-453.4	0.00	0.00	
3,200.0	9.85	182.72	3,160.6	-480.3	-24.3	-470.5	0.00	0.00	
3,300.0	9.85	182.72	3,259.2	-497.4	-25.2	-487.5	0.00	0.00	
3,400.0	9.85	182.72	3,357.7	-514.5	-26.0	-504.6	0.00	0.00	
3,500.0	9.85	182.72	3,456.2	-531.5	-26.8	-521.7	0.00	0.00	
3,600.0	9.85	182.72	3,554.8	-548.6	-27.6	-538.8	0.00	0.00	
3,700.0	9.85	182.72	3,653.3	-565.7	-28.4	-555.8	0.00	0.00	
3,800.0	9.85	182.72	3,751.8	-582.8	-29.2	-572.9	0.00	0.00	
3,900.0	9.85	182.72	3,850.3	-599.9	-30.0	-590.0	0.00	0.00	
3,958.5	9.85	182.72	3,908.0	-609.9	-30.5	-600.0	0.00	0.00	Wasatch
4,000.0	9.85	182.72	3,948.9	-616.9	-30.8	-607.1	0.00	0.00	
4,100.0	9.85	182.72	4,047.4	-634.0	-31.7	-624.2	0.00	0.00	
4,200.0	9.85	182.72	4,145.9	-651.1	-32.5	-641.2	0.00	0.00	
4,300.0	9.85	182.72	4,244.5	-668.2	-33.3	-658.3	0.00	0.00	
4,400.0	9.85	182.72	4,343.0	-685.3	-34.1	-675.4	0.00	0.00	
4,500.0	9.85	182.72	4,441.5	-702.3	-34.9	-692.5	0.00	0.00	
4,600.0	9.85	182.72	4,540.0	-719.4	-35.7	-709.6	0.00	0.00	
4,700.0	9.85	182.72	4,638.6	-736.5	-36.5	-726.6	0.00	0.00	
4,800.0	9.85	182.72	4,737.1	-753.6	-37.3	-743.7	0.00	0.00	
4,900.0	9.85	182.72	4,835.6	-770.7	-38.2	-760.8	0.00	0.00	
5,000.0	9.85	182.72	4,934.1	-787.7	-39.0	-777.9	0.00	0.00	
5,100.0	9.85	182.72	5,032.7	-804.8	-39.8	-795.0	0.00	0.00	
5,200.0	9.85	182.72	5,131.2	-821.9	-40.6	-812.0	0.00	0.00	
5,300.0	9.85	182.72	5,229.7	-839.0	-41.4	-829.1	0.00	0.00	
5,400.0	9.85	182.72	5,328.3	-856.0	-42.2	-846.2	0.00	0.00	
5,500.0	9.85	182.72	5,426.8	-873.1	-43.0	-863.3	0.00	0.00	
5,600.0	9.85	182.72	5,525.3	-890.2	-43.8	-880.4	0.00	0.00	
5,700.0	9.85	182.72	5,623.8	-907.3	-44.7	-897.4	0.00	0.00	
5,800.0	9.85	182.72	5,722.4	-924.4	-45.5	-914.5	0.00	0.00	
5,886.9	9.85	182.72	5,808.0	-939.2	-46.2	-929.4	0.00	0.00	Fort Union
5,900.0	9.85	182.72	5,820.9	-941.4	-46.3	-931.6	0.00	0.00	
6,000.0	9.85	182.72	5,919.4	-958.5	-47.1	-948.7	0.00	0.00	
6,100.0	9.85	182.72	6,017.9	-975.6	-47.9	-965.8	0.00	0.00	
6,200.0	9.85	182.72	6,116.5	-992.7	-48.7	-982.8	0.00	0.00	
6,300.0	9.85	182.72	6,215.0	-1,009.8	-49.5	-999.9	0.00	0.00	
6,394.4	9.85	182.72	6,308.0	-1,025.9	-50.3	-1,016.0	0.00	0.00	Base Ft Union
6,400.0	9.85	182.72	6,313.5	-1,026.8	-50.3	-1,017.0	0.00	0.00	
6,500.0	9.85	182.72	6,412.1	-1,043.9	-51.2	-1,034.1	0.00	0.00	
6,600.0	9.85	182.72	6,510.6	-1,061.0	-52.0	-1,051.2	0.00	0.00	
6,700.0	9.85	182.72	6,609.1	-1,078.1	-52.8	-1,068.2	0.00	0.00	
6,800.0	9.85	182.72	6,707.6	-1,095.2	-53.6	-1,085.3	0.00	0.00	
6,900.0	9.85	182.72	6,806.2	-1,112.2	-54.4	-1,102.4	0.00	0.00	
7,000.0	9.85	182.72	6,904.7	-1,129.3	-55.2	-1,119.5	0.00	0.00	
7,100.0	9.85	182.72	7,003.2	-1,146.4	-56.0	-1,136.6	0.00	0.00	
7,200.0	9.85	182.72	7,101.7	-1,163.5	-56.8	-1,153.6	0.00	0.00	
7,300.0	9.85	182.72	7,200.3	-1,180.6	-57.7	-1,170.7	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Project:	Garfield County	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site:	SESE S15-T5S-R95W (P15 595)	North Reference:	True
Well:	LR01A P15 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
7,400.0	9.85	182.72	7,298.8	-1,197.6	-58.5	-1,187.8	0.00	0.00	
7,500.0	9.85	182.72	7,397.3	-1,214.7	-59.3	-1,204.9	0.00	0.00	
7,600.0	9.85	182.72	7,495.9	-1,231.8	-60.1	-1,222.0	0.00	0.00	
7,700.0	9.85	182.72	7,594.4	-1,248.9	-60.9	-1,239.0	0.00	0.00	
7,800.0	9.85	182.72	7,692.9	-1,266.0	-61.7	-1,256.1	0.00	0.00	
7,900.0	9.85	182.72	7,791.4	-1,283.0	-62.5	-1,273.2	0.00	0.00	
8,000.0	9.85	182.72	7,890.0	-1,300.1	-63.3	-1,290.3	0.00	0.00	
8,100.0	9.85	182.72	7,988.5	-1,317.2	-64.2	-1,307.3	0.00	0.00	
8,200.0	9.85	182.72	8,087.0	-1,334.3	-65.0	-1,324.4	0.00	0.00	
8,300.0	9.85	182.72	8,185.5	-1,351.4	-65.8	-1,341.5	0.00	0.00	
8,400.0	9.85	182.72	8,284.1	-1,368.4	-66.6	-1,358.6	0.00	0.00	
8,500.0	9.85	182.72	8,382.6	-1,385.5	-67.4	-1,375.7	0.00	0.00	
8,600.0	9.85	182.72	8,481.1	-1,402.6	-68.2	-1,392.7	0.00	0.00	
8,700.0	9.85	182.72	8,579.7	-1,419.7	-69.0	-1,409.8	0.00	0.00	
8,728.8	9.85	182.72	8,608.0	-1,424.6	-69.3	-1,414.7	0.00	0.00	Ohio Creek
8,800.0	9.85	182.72	8,678.2	-1,436.8	-69.8	-1,426.9	0.00	0.00	
8,840.6	9.85	182.72	8,718.2	-1,443.7	-70.2	-1,433.8	0.00	0.00	Start Drop -2.00
8,900.0	8.66	182.72	8,776.8	-1,453.2	-70.6	-1,443.4	2.00	-2.00	
9,000.0	6.66	182.72	8,875.9	-1,466.5	-71.3	-1,456.7	2.00	-2.00	
9,032.3	6.01	182.72	8,908.0	-1,470.1	-71.4	-1,460.2	2.00	-2.00	Williams Fork
9,100.0	4.66	182.72	8,975.4	-1,476.4	-71.7	-1,466.5	2.00	-2.00	
9,200.0	2.66	182.72	9,075.2	-1,482.7	-72.0	-1,472.9	2.00	-2.00	
9,300.0	0.66	182.72	9,175.2	-1,485.6	-72.2	-1,475.8	2.00	-2.00	
9,332.8	0.00	0.00	9,208.0	-1,485.8	-72.2	-1,476.0	2.00	-2.00	EOD; Inc=0° - Approx TOG - LR01A P15 595 T
9,400.0	0.17	239.98	9,275.2	-1,485.9	-72.3	-1,476.0	0.25	0.25	
9,500.0	0.42	239.98	9,375.2	-1,486.1	-72.7	-1,476.3	0.25	0.25	
9,600.0	0.67	239.98	9,475.2	-1,486.6	-73.5	-1,476.8	0.25	0.25	
9,649.6	0.79	239.98	9,524.8	-1,486.9	-74.1	-1,477.1	0.25	0.25	
9,700.0	0.79	239.98	9,575.1	-1,487.3	-74.7	-1,477.4	0.00	0.00	
9,800.0	0.79	239.98	9,675.1	-1,488.0	-75.9	-1,478.1	0.00	0.00	
9,900.0	0.79	239.98	9,775.1	-1,488.7	-77.1	-1,478.8	0.00	0.00	
10,000.0	0.79	239.98	9,875.1	-1,489.3	-78.3	-1,479.5	0.00	0.00	
10,100.0	0.79	239.98	9,975.1	-1,490.0	-79.5	-1,480.2	0.00	0.00	
10,200.0	0.79	239.98	10,075.1	-1,490.7	-80.7	-1,480.9	0.00	0.00	
10,300.0	0.79	239.98	10,175.1	-1,491.4	-81.9	-1,481.6	0.00	0.00	
10,400.0	0.79	239.98	10,275.1	-1,492.1	-83.1	-1,482.3	0.00	0.00	
10,500.0	0.79	239.98	10,375.1	-1,492.8	-84.3	-1,483.0	0.00	0.00	
10,600.0	0.79	239.98	10,475.1	-1,493.5	-85.4	-1,483.6	0.00	0.00	
10,700.0	0.79	239.98	10,575.1	-1,494.2	-86.6	-1,484.3	0.00	0.00	
10,800.0	0.79	239.98	10,675.0	-1,494.9	-87.8	-1,485.0	0.00	0.00	
10,900.0	0.79	239.98	10,775.0	-1,495.6	-89.0	-1,485.7	0.00	0.00	
11,000.0	0.79	239.98	10,875.0	-1,496.3	-90.2	-1,486.4	0.00	0.00	
11,100.0	0.79	239.98	10,975.0	-1,496.9	-91.4	-1,487.1	0.00	0.00	
11,200.0	0.79	239.98	11,075.0	-1,497.6	-92.6	-1,487.8	0.00	0.00	
11,300.0	0.79	239.98	11,175.0	-1,498.3	-93.8	-1,488.5	0.00	0.00	
11,400.0	0.79	239.98	11,275.0	-1,499.0	-95.0	-1,489.2	0.00	0.00	
11,500.0	0.79	239.98	11,375.0	-1,499.7	-96.2	-1,489.9	0.00	0.00	
11,600.0	0.79	239.98	11,475.0	-1,500.4	-97.4	-1,490.6	0.00	0.00	
11,700.0	0.79	239.98	11,575.0	-1,501.1	-98.6	-1,491.3	0.00	0.00	
11,800.0	0.79	239.98	11,674.9	-1,501.8	-99.8	-1,491.9	0.00	0.00	
11,883.1	0.79	239.98	11,758.0	-1,502.4	-100.8	-1,492.5	0.00	0.00	Cameo
11,900.0	0.79	239.98	11,774.9	-1,502.5	-101.0	-1,492.6	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Project:	Garfield County	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site:	SESE S15-T5S-R95W (P15 595)	North Reference:	True
Well:	LR01A P15 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
12,000.0	0.79	239.98	11,874.9	-1,503.2	-102.2	-1,493.3	0.00	0.00	
12,100.0	0.79	239.98	11,974.9	-1,503.9	-103.4	-1,494.0	0.00	0.00	
12,200.0	0.79	239.98	12,074.9	-1,504.6	-104.6	-1,494.7	0.00	0.00	
12,233.1	0.79	239.98	12,108.0	-1,504.8	-105.0	-1,494.9	0.00	0.00	Rollins SS
12,300.0	0.79	239.98	12,174.9	-1,505.2	-105.8	-1,495.4	0.00	0.00	
12,383.1	0.79	239.98	12,258.0	-1,505.8	-106.8	-1,496.0	0.00	0.00	TD at 12383.1 - LR01A P15 595 BHL

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Latitude	Longitude
LR01A P15 595 BHL	0.00	0.00	12,258.0	-1,505.8	-106.8	1,655,568.40	2,286,481.37	39.606012	-108.032713
- plan hits target center									
- Rectangle (sides W50.0 H100.0 D0.0)									
LR01A P15 595 TGT	0.00	0.00	9,208.0	-1,485.8	-72.2	1,655,587.42	2,286,516.52	39.606067	-108.032590
- plan hits target center									
- Point									

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,958.5	3,908.0	Wasatch		0.00	
5,886.9	5,808.0	Fort Union		0.00	
6,394.4	6,308.0	Base Ft Union		0.00	
8,728.8	8,608.0	Ohio Creek		0.00	
9,032.3	8,908.0	Williams Fork		0.00	
9,332.8	9,208.0	Approx TOG		0.00	
11,883.1	11,758.0	Cameo		0.00	
12,233.1	12,108.0	Rollins SS		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	-9.8	-2.0	KOP @ 200'
692.3	689.8	-52.0	-4.0	EOB; Inc=9.85°
8,840.6	8,718.2	-1,443.7	-70.2	Start Drop -2.00
9,332.8	9,208.0	-1,485.8	-72.2	EOD; Inc=0°
12,383.1	12,258.0	-1,505.8	-106.8	TD at 12383.1

Berry Petroleum Company (NAD 83)

Garfield County

SESE S15-T5S-R95W (P15 595)

LR01A P15 595

DD

Plan #1

Anticollision Report

23 September, 2010

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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	9/23/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,383.1	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						
NESE S15-T5S-R95 (P15 595)						
LR09B P15 595 - DD - Plan #1	200.0	200.0	70.0	69.3	108.359	CC, ES
LR09B P15 595 - DD - Plan #1	600.0	595.9	99.0	97.0	48.809	SF
LR09C P15 595 - DD - Plan #1	200.0	200.0	59.9	59.3	92.827	CC, ES
LR09C P15 595 - DD - Plan #1	600.0	598.7	87.6	85.5	43.086	SF
LR09D P15 595 - DD - Plan #1	200.0	200.0	80.0	79.4	123.891	CC, ES
LR09D P15 595 - DD - Plan #1	500.0	499.5	95.5	93.8	56.567	SF
LR16B P15 595 - DD - Plan #1	200.0	200.0	49.9	49.2	77.212	CC, ES
LR16B P15 595 - DD - Plan #1	600.0	598.7	77.5	75.5	38.144	SF
SESE S15-T5S-R95W (P15 595)						
LR01B P15 595 - DD - Plan #1	200.0	200.0	10.0	9.4	15.526	CC
LR01B P15 595 - DD - Plan #1	700.0	698.3	10.4	8.0	4.237	ES, SF
LR01D P15 595 - DD - Plan #1	200.0	200.0	29.8	29.1	46.128	CC
LR01D P15 595 - DD - Plan #1	1,700.0	1,710.0	37.4	27.2	3.661	ES, SF
LR16A P15 595 - DD - Plan #1	200.0	200.0	39.8	39.2	61.666	CC, ES
LR16A P15 595 - DD - Plan #1	500.0	499.5	55.4	53.7	32.794	SF
LR16C P15 595 - DD - Plan #1	200.0	200.0	19.8	19.1	30.610	CC, ES
LR16C P15 595 - DD - Plan #1	2,300.0	2,308.6	98.7	88.7	9.877	SF
LR16D P15 595 - DD - Plan #1	200.0	200.0	10.0	9.4	15.539	CC, ES
LR16D P15 595 - DD - Plan #1	7,100.0	7,136.0	88.8	41.8	1.889	SF

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 NESE S15-T5S-R95 (P15 595) - LR09B P15 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	11.85	58.6	12.4	70.0				
100.0	100.0	100.0	100.0	0.1	0.1	11.85	58.6	12.4	70.0	69.7	0.30	235.840	
200.0	200.0	200.0	200.0	0.3	0.3	11.85	58.6	12.4	70.0	69.3	0.65	108.359 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-171.09	58.6	12.4	71.7	70.7	0.99	72.092	
400.0	399.8	399.8	399.8	0.7	0.7	-171.68	58.6	12.4	76.9	75.5	1.34	57.264	
500.0	499.5	499.5	499.5	0.9	0.8	-172.50	58.6	12.4	85.5	83.8	1.69	50.630	
600.0	598.7	595.9	595.9	1.2	1.0	-173.90	60.1	11.7	99.0	97.0	2.03	48.809 SF	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 NESE S15-T5S-R95 (P15 595) - LR09C P15 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	11.93	48.8	10.4	59.9					
100.0	100.0	100.0	100.0	0.1	0.1	11.93	48.8	10.4	59.9	59.6	0.30	202.035		
200.0	200.0	200.0	200.0	0.3	0.3	11.93	48.8	10.4	59.9	59.3	0.65	92.827 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-171.04	48.8	10.4	61.7	60.7	0.99	62.007		
400.0	399.8	399.8	399.8	0.7	0.7	-171.73	48.8	10.4	66.8	65.5	1.34	49.792		
500.0	499.5	499.5	499.5	0.9	0.8	-172.66	48.8	10.4	75.5	73.8	1.69	44.694		
600.0	598.7	598.7	598.7	1.2	1.0	-173.65	48.8	10.4	87.6	85.5	2.03	43.086 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 NESE S15-T5S-R95 (P15 595) - LR09D P15 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	11.79	68.5	14.4	80.0					
100.0	100.0	100.0	100.0	0.1	0.1	11.79	68.5	14.4	80.0	79.7	0.30	269.645		
200.0	200.0	200.0	200.0	0.3	0.3	11.79	68.5	14.4	80.0	79.4	0.65	123.891 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-171.13	68.5	14.4	81.7	80.7	0.99	82.178		
400.0	399.8	399.8	399.8	0.7	0.7	-171.64	68.5	14.4	86.9	85.6	1.34	64.735		
500.0	499.5	499.5	499.5	0.9	0.8	-172.38	68.5	14.4	95.5	93.8	1.69	56.567 SF		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 NESE S15-T5S-R95 (P15 595) - LR16B P15 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	11.74	39.0	8.2	49.9					
100.0	100.0	100.0	100.0	0.1	0.1	11.74	39.0	8.2	49.9	49.6	0.30	168.049		
200.0	200.0	200.0	200.0	0.3	0.3	11.74	39.0	8.2	49.9	49.2	0.65	77.212 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-171.28	39.0	8.2	51.6	50.6	0.99	51.869		
400.0	399.8	399.8	399.8	0.7	0.7	-172.07	39.0	8.2	56.8	55.4	1.34	42.286		
500.0	499.5	499.5	499.5	0.9	0.8	-173.10	39.0	8.2	65.4	63.7	1.69	38.734		
600.0	598.7	598.7	598.7	1.2	1.0	-174.16	39.0	8.2	77.5	75.5	2.03	38.144 SF		
692.3	689.8	689.8	689.8	1.5	1.2	-175.04	39.0	8.2	91.8	89.4	2.35	39.109		
700.0	697.5	697.5	697.5	1.5	1.2	-175.11	39.0	8.2	93.1	90.7	2.37	39.223		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 SESE S15-T5S-R95W (P15 595) - LR01B P15 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	-168.66	-19.7	-3.9	10.0						
100.0	100.0	100.0	100.0	0.1	0.1	-168.66	-19.7	-3.9	10.0	9.7	0.30	33.792			
200.0	200.0	200.0	200.0	0.3	0.3	-168.66	-19.7	-3.9	10.0	9.4	0.65	15.526 CC			
300.0	300.0	299.7	299.6	0.5	0.5	9.14	-21.4	-4.1	10.0	9.0	0.99	10.092			
400.0	399.8	399.3	399.1	0.7	0.7	10.68	-26.6	-4.6	10.1	8.7	1.34	7.487			
500.0	499.5	499.0	498.4	0.9	0.9	13.23	-35.2	-5.5	10.1	8.4	1.69	5.962			
600.0	598.7	598.6	597.3	1.2	1.2	16.74	-47.2	-6.7	10.2	8.2	2.06	4.958			
692.3	689.8	690.6	688.2	1.5	1.5	20.75	-61.4	-8.1	10.4	8.0	2.43	4.282			
700.0	697.5	698.3	695.8	1.5	1.5	21.09	-62.7	-8.2	10.4	8.0	2.46	4.237 ES, SF			
800.0	796.0	797.9	793.6	1.8	1.9	22.14	-81.5	-10.1	12.6	9.7	2.87	4.381			
900.0	894.5	897.8	891.4	2.2	2.2	21.02	-101.9	-12.2	16.2	12.9	3.25	4.970			
1,000.0	993.0	997.8	989.2	2.5	2.6	20.30	-122.4	-14.2	19.8	16.1	3.64	5.433			
1,100.0	1,091.6	1,097.7	1,087.0	2.8	3.0	19.81	-142.8	-16.2	23.4	19.4	4.03	5.806			
1,200.0	1,190.1	1,197.6	1,184.8	3.2	3.4	19.45	-163.2	-18.3	27.0	22.6	4.42	6.113			
1,300.0	1,288.6	1,297.6	1,282.6	3.5	3.8	19.17	-183.6	-20.3	30.6	25.8	4.81	6.370			
1,400.0	1,387.2	1,397.5	1,380.4	3.8	4.2	18.95	-204.0	-22.3	34.3	29.1	5.20	6.588			
1,500.0	1,485.7	1,497.4	1,478.2	4.2	4.6	18.78	-224.4	-24.4	37.9	32.3	5.59	6.776			
1,600.0	1,584.2	1,597.4	1,576.0	4.5	5.0	18.63	-244.8	-26.4	41.5	35.5	5.98	6.938			
1,700.0	1,682.7	1,697.3	1,673.8	4.9	5.4	18.51	-265.2	-28.5	45.1	38.8	6.37	7.081			
1,800.0	1,781.3	1,797.2	1,771.6	5.2	5.8	18.40	-285.7	-30.5	48.8	42.0	6.76	7.208			
1,900.0	1,879.8	1,897.2	1,869.4	5.6	6.2	18.31	-306.1	-32.5	52.4	45.2	7.16	7.320			
2,000.0	1,978.3	1,997.1	1,967.2	5.9	6.5	18.24	-326.5	-34.6	56.0	48.5	7.55	7.420			
2,100.0	2,076.8	2,097.0	2,065.0	6.3	6.9	18.17	-346.9	-36.6	59.6	51.7	7.94	7.511			
2,200.0	2,175.4	2,197.0	2,162.8	6.6	7.3	18.11	-367.3	-38.6	63.2	54.9	8.33	7.593			
2,300.0	2,273.9	2,296.9	2,260.7	6.9	7.7	18.05	-387.7	-40.7	66.9	58.1	8.72	7.668			
2,400.0	2,372.4	2,396.8	2,358.5	7.3	8.1	18.01	-408.1	-42.7	70.5	61.4	9.11	7.736			
2,500.0	2,471.0	2,496.8	2,456.3	7.6	8.5	17.96	-428.5	-44.8	74.1	64.6	9.50	7.799			
2,600.0	2,569.5	2,596.7	2,554.1	8.0	8.9	17.92	-449.0	-46.8	77.7	67.8	9.89	7.856			
2,700.0	2,668.0	2,696.6	2,651.9	8.3	9.3	17.89	-469.4	-48.8	81.4	71.1	10.29	7.910			
2,800.0	2,766.5	2,796.6	2,749.7	8.7	9.7	17.85	-489.8	-50.9	85.0	74.3	10.68	7.959			
2,900.0	2,865.1	2,896.5	2,847.5	9.0	10.1	17.82	-510.2	-52.9	88.6	77.5	11.07	8.005			
3,000.0	2,963.6	2,996.4	2,945.3	9.4	10.5	17.79	-530.6	-54.9	92.2	80.8	11.46	8.047			
3,100.0	3,062.1	3,096.4	3,043.1	9.7	10.9	17.77	-551.0	-57.0	95.9	84.0	11.85	8.087			
3,200.0	3,160.6	3,196.3	3,140.9	10.0	11.3	17.74	-571.4	-59.0	99.5	87.2	12.24	8.124			

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 SESE S15-T5S-R95W (P15 595) - LR01D P15 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	12.01	19.3	4.2	29.8					
100.0	100.0	100.0	100.0	0.1	0.1	12.01	19.3	4.2	29.8	29.5	0.30	100.395		
200.0	200.0	200.0	200.0	0.3	0.3	12.01	19.3	4.2	29.8	29.1	0.65	46.128 CC		
300.0	300.0	299.0	299.0	0.5	0.5	-169.57	20.5	5.4	33.0	32.0	0.99	33.168		
400.0	399.8	400.0	400.0	0.7	0.7	-167.78	21.2	7.8	39.4	38.0	1.35	29.241		
500.0	499.5	501.3	501.2	0.9	0.9	-166.49	18.4	10.1	45.8	44.1	1.70	26.866		
600.0	598.7	602.8	602.4	1.2	1.1	-165.52	12.0	12.1	52.2	50.1	2.07	25.207		
692.3	689.8	696.6	695.8	1.5	1.3	-164.81	2.9	13.8	58.0	55.6	2.42	24.014		
700.0	697.5	704.5	703.6	1.5	1.3	-164.76	2.0	14.0	58.5	56.1	2.45	23.915		
800.0	796.0	806.5	804.7	1.8	1.6	-163.67	-11.6	15.6	62.8	60.0	2.84	22.096		
900.0	894.5	908.6	905.3	2.2	1.9	-161.78	-28.9	17.1	63.8	60.5	3.27	19.513		
1,000.0	993.0	1,010.6	1,005.2	2.5	2.2	-158.81	-49.7	18.4	61.5	57.7	3.74	16.412		
1,100.0	1,091.6	1,112.0	1,103.7	2.8	2.7	-154.15	-73.8	19.4	56.1	51.8	4.32	12.997		
1,200.0	1,190.1	1,211.7	1,200.2	3.2	3.1	-147.91	-98.8	20.4	50.1	45.1	5.02	9.978		
1,300.0	1,288.6	1,311.4	1,296.6	3.5	3.5	-140.09	-123.7	21.4	44.8	38.9	5.89	7.607		
1,400.0	1,387.2	1,411.0	1,393.1	3.8	4.0	-130.44	-148.7	22.3	40.6	33.7	6.95	5.842		
1,500.0	1,485.7	1,510.7	1,489.6	4.2	4.4	-118.98	-173.6	23.3	37.8	29.6	8.13	4.644		
1,600.0	1,584.2	1,610.3	1,586.0	4.5	4.9	-106.27	-198.6	24.3	36.7	27.4	9.29	3.948		
1,609.4	1,593.4	1,619.6	1,595.1	4.6	4.9	-105.05	-200.9	24.4	36.7	27.3	9.39	3.905		
1,700.0	1,682.7	1,710.0	1,682.5	4.9	5.4	-93.45	-223.6	25.3	37.4	27.2	10.22	3.661 ES, SF		
1,800.0	1,781.3	1,809.6	1,779.0	5.2	5.8	-81.69	-248.5	26.2	40.0	29.1	10.86	3.680		
1,900.0	1,879.8	1,909.3	1,875.4	5.6	6.3	-71.68	-273.5	27.2	43.9	32.7	11.24	3.911		
2,000.0	1,978.3	2,008.9	1,971.9	5.9	6.7	-63.53	-298.4	28.2	49.0	37.6	11.46	4.277		
2,100.0	2,076.8	2,108.6	2,068.4	6.3	7.2	-57.02	-323.4	29.2	54.9	43.3	11.63	4.723		
2,200.0	2,175.4	2,208.2	2,164.9	6.6	7.7	-51.81	-348.4	30.1	61.4	49.6	11.78	5.212		
2,300.0	2,273.9	2,307.9	2,261.3	6.9	8.1	-47.63	-373.3	31.1	68.3	56.3	11.94	5.716		
2,400.0	2,372.4	2,407.5	2,357.8	7.3	8.6	-44.22	-398.3	32.1	75.4	63.3	12.12	6.221		
2,500.0	2,471.0	2,507.2	2,454.3	7.6	9.1	-41.41	-423.2	33.0	82.8	70.5	12.33	6.717		
2,600.0	2,569.5	2,606.8	2,550.7	8.0	9.5	-39.06	-448.2	34.0	90.4	77.8	12.56	7.197		
2,700.0	2,668.0	2,706.5	2,647.2	8.3	10.0	-37.08	-473.2	35.0	98.0	85.2	12.80	7.659		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 SESE S15-T5S-R95W (P15 595) - LR16A P15 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	11.84	29.1	6.2	39.8					
100.0	100.0	100.0	100.0	0.1	0.1	11.84	29.1	6.2	39.8	39.5	0.30	134.215		
200.0	200.0	200.0	200.0	0.3	0.3	11.84	29.1	6.2	39.8	39.2	0.65	61.666 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-171.26	29.1	6.2	41.5	40.6	0.99	41.774		
400.0	399.8	399.8	399.8	0.7	0.7	-172.22	29.1	6.2	46.7	45.4	1.34	34.808		
500.0	499.5	499.5	499.5	0.9	0.8	-173.42	29.1	6.2	55.4	53.7	1.69	32.794 SF		
600.0	598.7	598.7	598.7	1.2	1.0	-174.58	29.1	6.2	67.5	65.5	2.03	33.215		
692.3	689.8	689.8	689.8	1.5	1.2	-175.51	29.1	6.2	81.8	79.4	2.35	34.848		
700.0	697.5	697.5	697.5	1.5	1.2	-175.58	29.1	6.2	83.1	80.7	2.37	35.010		

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 SESE S15-T5S-R95W (P15 595) - LR16C P15 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	12.35	9.5	2.3	19.8				
100.0	100.0	100.0	100.0	0.1	0.1	12.35	9.5	2.3	19.8	19.5	0.30	66.621	
200.0	200.0	200.0	200.0	0.3	0.3	12.35	9.5	2.3	19.8	19.1	0.65	30.610 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-171.15	9.5	2.3	21.5	20.5	0.99	21.607	
400.0	399.8	399.8	399.8	0.7	0.7	-172.87	9.5	2.3	26.7	25.3	1.34	19.871	
500.0	499.5	499.5	499.5	0.9	0.8	-174.61	9.5	2.3	35.3	33.6	1.69	20.932	
600.0	598.7	598.7	598.7	1.2	1.0	-175.97	9.5	2.3	47.5	45.5	2.03	23.376	
692.3	689.8	691.8	691.8	1.5	1.2	-177.12	8.0	1.9	60.3	58.0	2.35	25.698	
700.0	697.5	699.6	699.6	1.5	1.2	-177.22	7.8	1.8	61.4	59.0	2.38	25.855	
800.0	796.0	801.2	801.1	1.8	1.4	-178.55	2.6	0.5	73.4	70.7	2.73	26.907	
900.0	894.5	903.6	903.0	2.2	1.6	180.00	-6.1	-1.8	81.9	78.8	3.08	26.574	
1,000.0	993.0	1,006.4	1,005.0	2.5	1.8	178.27	-18.4	-5.0	87.0	83.6	3.44	25.270	
1,100.0	1,091.6	1,109.4	1,106.7	2.8	2.1	176.12	-34.2	-9.1	88.7	84.9	3.81	23.255	
1,200.0	1,190.1	1,209.3	1,205.1	3.2	2.4	173.76	-51.4	-13.6	88.7	84.6	4.20	21.154	
1,300.0	1,288.6	1,309.3	1,303.4	3.5	2.7	171.40	-68.6	-18.1	88.9	84.3	4.59	19.359	
1,400.0	1,387.2	1,409.2	1,401.8	3.8	3.1	169.06	-85.7	-22.5	89.3	84.3	5.02	17.802	
1,500.0	1,485.7	1,509.1	1,500.1	4.2	3.4	166.74	-102.9	-27.0	89.8	84.3	5.46	16.440	
1,600.0	1,584.2	1,609.1	1,598.5	4.5	3.7	164.44	-120.0	-31.5	90.4	84.5	5.93	15.239	
1,700.0	1,682.7	1,709.0	1,696.8	4.9	4.1	162.19	-137.2	-36.0	91.2	84.8	6.43	14.176	
1,800.0	1,781.3	1,808.9	1,795.2	5.2	4.4	159.97	-154.4	-40.4	92.1	85.2	6.96	13.232	
1,900.0	1,879.8	1,908.9	1,893.5	5.6	4.8	157.80	-171.5	-44.9	93.2	85.7	7.52	12.395	
2,000.0	1,978.3	2,008.8	1,991.9	5.9	5.1	155.69	-188.7	-49.4	94.4	86.3	8.10	11.650	
2,100.0	2,076.8	2,108.7	2,090.2	6.3	5.4	153.62	-205.8	-53.8	95.7	87.0	8.71	10.989	
2,200.0	2,175.4	2,208.7	2,188.6	6.6	5.8	151.62	-223.0	-58.3	97.1	87.8	9.34	10.400	
2,300.0	2,273.9	2,308.6	2,286.9	6.9	6.1	149.68	-240.1	-62.8	98.7	88.7	9.99	9.877 SF	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 SESE S15-T5S-R95W (P15 595) - LR16D P15 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	11.33	0.0	0.0	10.0					
100.0	100.0	100.0	100.0	0.1	0.1	11.33	0.0	0.0	10.0	9.7	0.30	33.821		
200.0	200.0	200.0	200.0	0.3	0.3	11.33	0.0	0.0	10.0	9.4	0.65	15.539 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-172.66	0.0	0.0	11.8	10.8	0.99	11.828		
400.0	399.8	399.8	399.8	0.7	0.7	-174.91	0.0	0.0	17.0	15.6	1.34	12.642		
500.0	499.5	499.5	499.5	0.9	0.8	-176.62	0.0	0.0	25.7	24.0	1.69	15.204		
600.0	598.7	600.0	600.0	1.2	1.0	-177.38	-1.8	0.1	36.1	34.1	2.03	17.767		
692.3	689.8	693.1	692.9	1.5	1.2	-177.44	-6.5	0.2	45.8	43.4	2.35	19.470		
700.0	697.5	700.9	700.7	1.5	1.2	-177.43	-7.0	0.2	46.6	44.2	2.38	19.582		
800.0	796.0	802.3	801.7	1.8	1.4	-177.08	-15.9	0.5	55.0	52.3	2.73	20.137		
900.0	894.5	904.2	902.9	2.2	1.7	-176.34	-28.5	1.0	60.0	56.9	3.09	19.408		
1,000.0	993.0	1,006.3	1,003.7	2.5	2.0	-175.20	-44.6	1.5	61.4	57.9	3.45	17.785		
1,100.0	1,091.6	1,108.4	1,103.9	2.8	2.3	-173.47	-64.3	2.2	59.4	55.5	3.83	15.514		
1,200.0	1,190.1	1,209.9	1,202.7	3.2	2.7	-170.77	-87.4	3.0	53.9	49.7	4.22	12.769		
1,300.0	1,288.6	1,309.7	1,299.5	3.5	3.1	-167.09	-111.4	3.8	47.5	42.8	4.67	10.162		
1,400.0	1,387.2	1,409.4	1,396.3	3.8	3.5	-162.27	-135.3	4.6	41.2	36.0	5.21	7.921		
1,500.0	1,485.7	1,509.1	1,493.1	4.2	4.0	-155.81	-159.2	5.4	35.4	29.5	5.90	5.998		
1,600.0	1,584.2	1,608.9	1,590.0	4.5	4.4	-146.97	-183.2	6.2	30.2	23.3	6.87	4.397		
1,700.0	1,682.7	1,708.6	1,686.8	4.9	4.8	-134.89	-207.1	7.1	26.0	17.8	8.19	3.173		
1,800.0	1,781.3	1,808.3	1,783.6	5.2	5.3	-119.17	-231.0	7.9	23.3	13.5	9.77	2.383		
1,875.3	1,855.4	1,883.4	1,856.5	5.5	5.6	-105.66	-249.1	8.5	22.6	11.8	10.88	2.081		
1,900.0	1,879.8	1,908.1	1,880.4	5.6	5.7	-101.14	-255.0	8.7	22.7	11.5	11.18	2.031		
2,000.0	1,978.3	2,007.8	1,977.2	5.9	6.2	-83.94	-278.9	9.5	24.4	12.4	11.97	2.037		
2,100.0	2,076.8	2,107.6	2,074.1	6.3	6.6	-69.99	-302.9	10.3	27.9	15.7	12.20	2.287		
2,200.0	2,175.4	2,207.3	2,170.9	6.6	7.0	-59.62	-326.8	11.1	32.7	20.5	12.19	2.681		
2,300.0	2,273.9	2,307.0	2,267.7	6.9	7.5	-52.06	-350.7	11.9	38.2	26.1	12.15	3.146		
2,400.0	2,372.4	2,406.8	2,364.5	7.3	7.9	-46.48	-374.7	12.8	44.3	32.1	12.16	3.641		
2,500.0	2,471.0	2,506.5	2,461.3	7.6	8.4	-42.28	-398.6	13.6	50.6	38.4	12.24	4.138		
2,600.0	2,569.5	2,606.2	2,558.1	8.0	8.8	-39.02	-422.5	14.4	57.2	44.9	12.37	4.626		
2,700.0	2,668.0	2,706.0	2,655.0	8.3	9.3	-36.45	-446.5	15.2	63.9	51.4	12.55	5.096		
2,800.0	2,766.5	2,805.7	2,751.8	8.7	9.7	-34.36	-470.4	16.0	70.8	58.0	12.76	5.546		
2,900.0	2,865.1	2,905.4	2,848.6	9.0	10.2	-32.65	-494.3	16.8	77.7	64.7	13.00	5.973		
3,000.0	2,963.6	3,005.2	2,945.4	9.4	10.6	-31.21	-518.3	17.6	84.6	71.4	13.27	6.378		
3,100.0	3,062.1	3,104.9	3,042.2	9.7	11.1	-30.00	-542.2	18.5	91.6	78.1	13.55	6.761		
3,200.0	3,160.6	3,204.7	3,139.1	10.0	11.5	-28.96	-566.1	19.3	98.7	84.8	13.85	7.124		
6,900.0	6,806.2	6,938.8	6,806.5	22.8	23.4	-73.33	-1,143.8	33.8	93.7	49.4	44.37	2.112		
7,000.0	6,904.7	7,037.4	6,905.1	23.2	23.5	-83.39	-1,144.1	33.3	89.8	43.6	46.20	1.943		
7,079.4	6,982.9	7,115.6	6,983.4	23.4	23.5	-91.80	-1,144.3	32.9	88.8	41.8	46.95	1.891		
7,100.0	7,003.2	7,136.0	7,003.7	23.5	23.5	-94.00	-1,144.4	32.8	88.8	41.8	47.02	1.889 SF		
7,200.0	7,101.7	7,234.6	7,102.3	23.9	23.6	-104.47	-1,144.7	32.2	91.0	44.3	46.69	1.950		
7,300.0	7,200.3	7,333.1	7,200.9	24.2	23.7	-114.15	-1,145.0	31.7	96.2	50.7	45.44	2.116		

Cathedral Energy Services

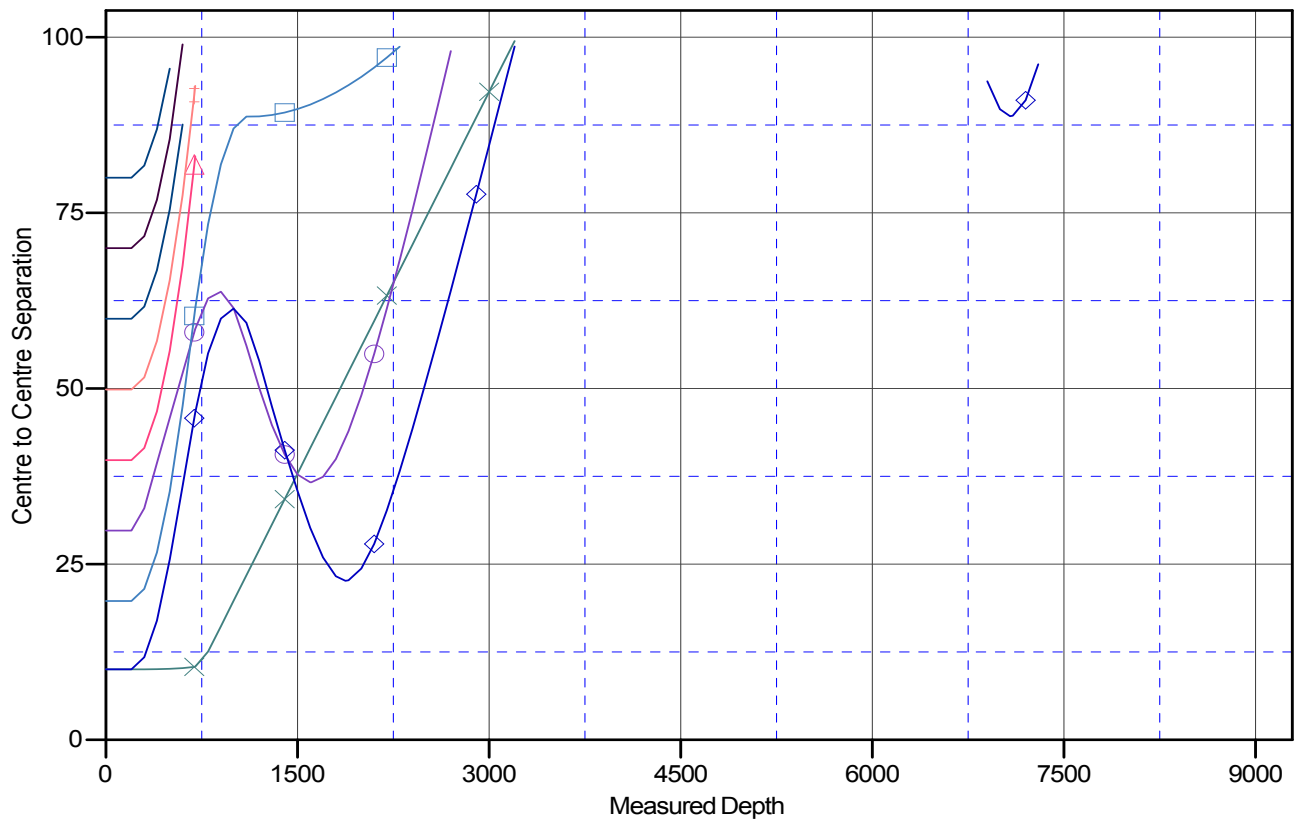
Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Site SESE S15-T5S-R95W (P15 595)
Project:	Garfield County	TVD Reference:	KBE @ 8400.0ft (Patterson 302)
Reference Site:	SESE S15-T5S-R95W (P15 595)	MD Reference:	KBE @ 8400.0ft (Patterson 302)
Site Error:	0.0ft	North Reference:	True
Reference Well:	LR01A P15 595	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 @ 8400.0ft (Patterson 302)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: SESE S15-T5S-R95W (P15 595)
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.60°

Ladder Plot



LEGEND

◆ LR09B P15 595, DD, Plan #1 V0	◆ LR16B P15 595, DD, Plan #1 V0	◆ LR16AP15 595, DD, Plan #1 V0
◆ LR09C P15 595, DD, Plan #1 V0	◆ LR01B P15 595, DD, Plan #1 V0	◆ LR16C P15 595, DD, Plan #1 V0
◆ LR09D P15 595, DD, Plan #1 V0	◆ LR01D P15 595, DD, Plan #1 V0	◆ LR16D P15 595, DD, Plan #1 V0