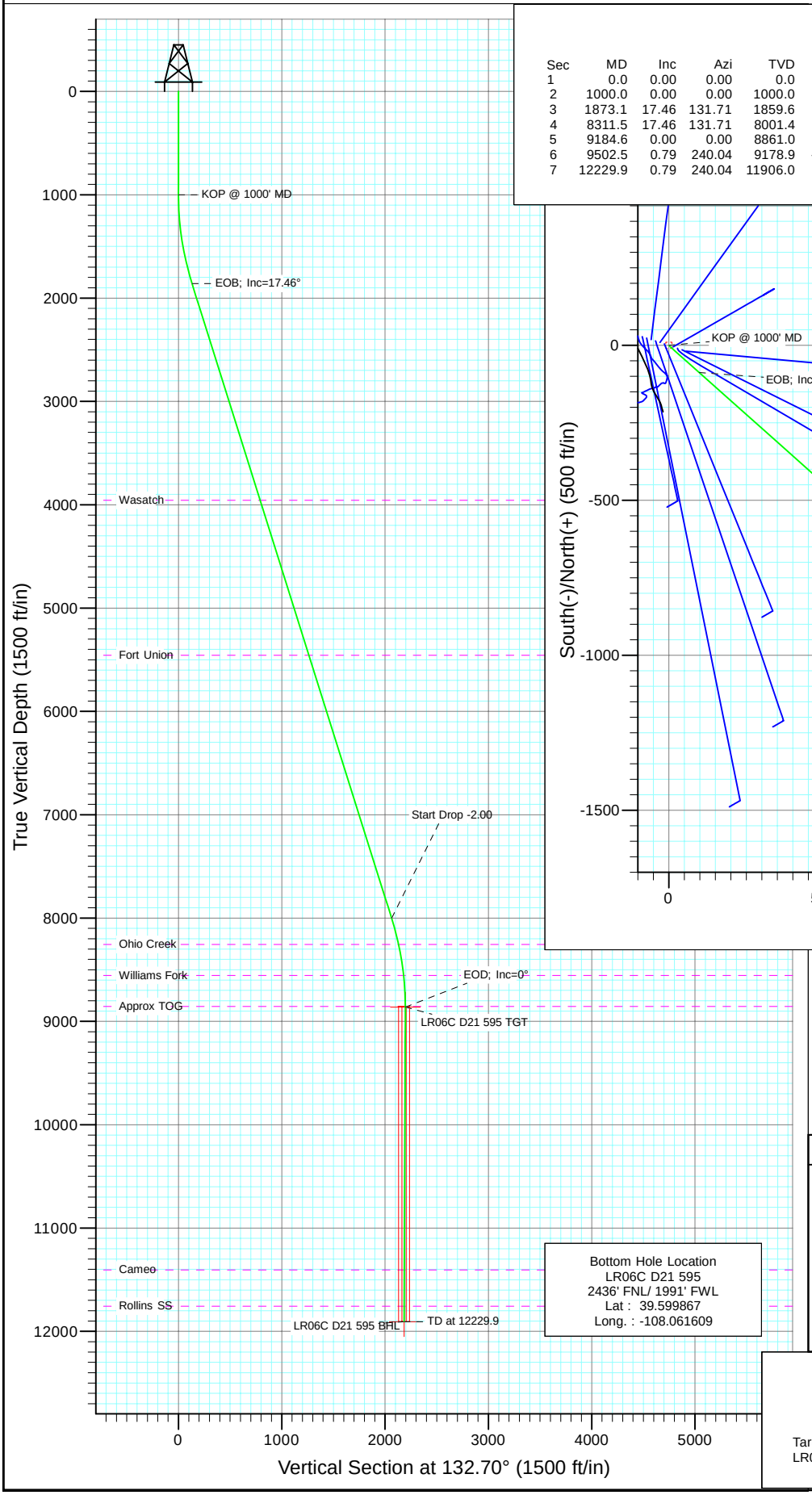
Berry Petroleum Company

Project: Garfield County
Site: D21 595 Pad
Well: LR06C D21 595
Wellbore: DD
Design: Plan #2

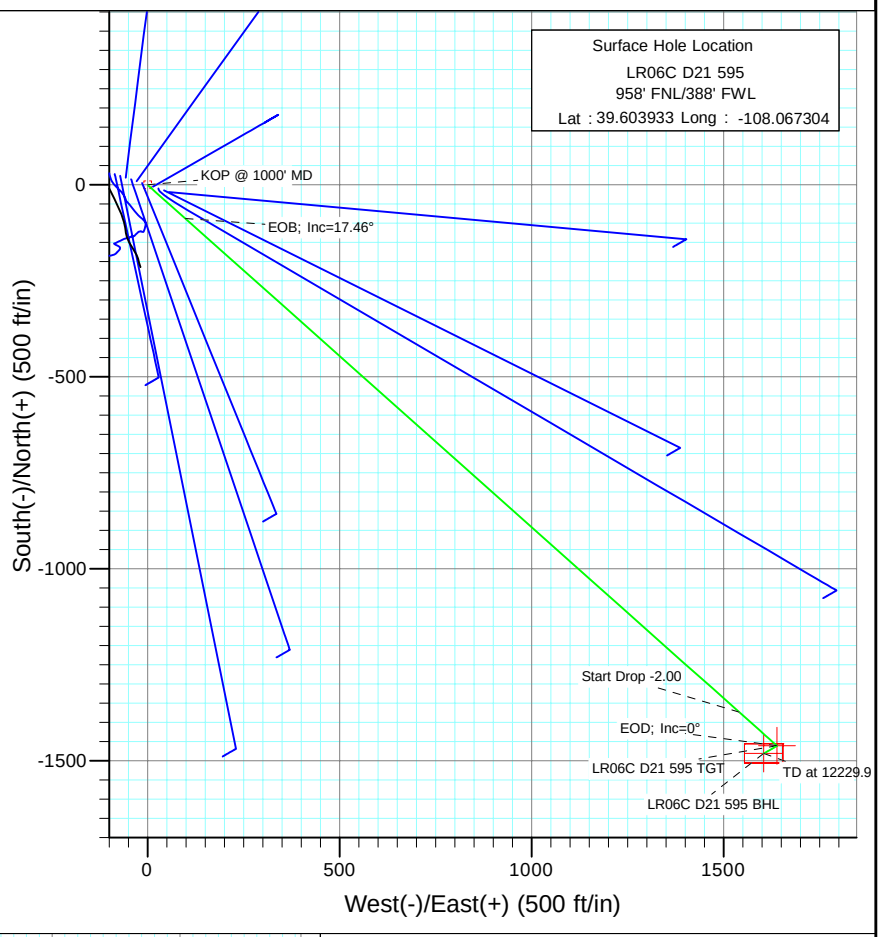
CATHEDRAL

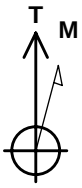
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1873.1	17.46	131.71	1859.6	-87.8	98.6	2.00	131.71	132.0	
4	8311.5	17.46	131.71	8001.4	-1373.2	1540.9	0.00	0.00	2063.7	
5	9184.6	0.00	0.00	8861.0	-1461.0	1639.5	2.00	180.00	2195.6	LR06C D21 595 TGT
6	9502.5	0.79	240.04	9178.9	-1462.1	1637.5	0.25	240.04	2195.0	
7	12229.9	0.79	240.04	11906.0	-1481.0	1604.8	0.00	0.00	2183.7	LR06C D21 595 BHL



Bottom Hole Location
LR06C D21 595
2436' FNL/ 1991' FWL
Lat : 39.599867
Long. : -108.061609





Azimuths to True North
Magnetic North: 10.44°

Magnetic Field
Strength: 52368.8snT
Dip Angle: 65.84°
Date: 11/23/2010
Model: IGRF200510

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3956.0	4070.7	Wasatch
5456.0	5643.2	Fort Union
8256.0	8575.0	Ohio Creek
8556.0	8879.0	Williams Fork
8856.0	9179.6	Approx TOG
11406.0	11729.8	Cameo
11756.0	12079.9	Rollins SS

DESIGN DETAILS: Plan #2

1055XX; BH
KBE @ 8278.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From TVD
LR06C D21 595 BHL	132.70	Slot	0.0	0.0	0.0

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well LR06C D21 595
Company:	Berry Petroleum Company (NAD 83)	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	**North Reference:**	True
Well:	LR06C D21 595	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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 D21 595 Pad

Site Position:		**Northing:**	1,655,115.77 ft	**Latitude:**	39.604011
From:	Lat/Long	**Easting:**	2,276,632.91 ft	**Longitude:**	-108.067607
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	-1.62 °

Well LR06C D21 595

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,655,084.95 ft	**Latitude:**	39.603933
	+E/-W	0.0 ft	**Easting:**	2,276,717.45 ft	**Longitude:**	-108.067304
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	8,263.0 ft

Wellbore DD

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/23/2010	10.44	65.84	52,369

Design Plan #2

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	132.70

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,873.1	17.46	131.71	1,859.6	-87.8	98.6	2.00	2.00	0.00	131.71	
8,311.5	17.46	131.71	8,001.4	-1,373.2	1,540.9	0.00	0.00	0.00	0.00	
9,184.6	0.00	0.00	8,861.0	-1,461.0	1,639.5	2.00	-2.00	0.00	180.00	LR06C D21 595 TGT
9,502.5	0.79	240.04	9,178.9	-1,462.1	1,637.5	0.25	0.25	-37.73	240.04	
12,229.9	0.79	240.04	11,906.0	-1,481.0	1,604.8	0.00	0.00	0.00	0.00	LR06C D21 595 BHL

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well LR06C D21 595
Company:	Berry Petroleum Company (NAD 83)	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	**North Reference:**	True
Well:	LR06C D21 595	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	0.0	0.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	0.0	0.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	0.0	0.0	0.0	0.00	0.00	
210.0	0.00	0.00	210.0	0.0	0.0	0.0	0.00	0.00	
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	
270.0	0.00	0.00	270.0	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	
330.0	0.00	0.00	330.0	0.0	0.0	0.0	0.00	0.00	
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	
390.0	0.00	0.00	390.0	0.0	0.0	0.0	0.00	0.00	
420.0	0.00	0.00	420.0	0.0	0.0	0.0	0.00	0.00	
450.0	0.00	0.00	450.0	0.0	0.0	0.0	0.00	0.00	
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	
510.0	0.00	0.00	510.0	0.0	0.0	0.0	0.00	0.00	
540.0	0.00	0.00	540.0	0.0	0.0	0.0	0.00	0.00	
570.0	0.00	0.00	570.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
630.0	0.00	0.00	630.0	0.0	0.0	0.0	0.00	0.00	
660.0	0.00	0.00	660.0	0.0	0.0	0.0	0.00	0.00	
690.0	0.00	0.00	690.0	0.0	0.0	0.0	0.00	0.00	
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	
750.0	0.00	0.00	750.0	0.0	0.0	0.0	0.00	0.00	
780.0	0.00	0.00	780.0	0.0	0.0	0.0	0.00	0.00	
810.0	0.00	0.00	810.0	0.0	0.0	0.0	0.00	0.00	
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	
870.0	0.00	0.00	870.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
930.0	0.00	0.00	930.0	0.0	0.0	0.0	0.00	0.00	
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	
990.0	0.00	0.00	990.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	KOP @ 1000' MD
1,020.0	0.40	131.71	1,020.0	0.0	0.1	0.1	2.00	2.00	
1,050.0	1.00	131.71	1,050.0	-0.3	0.3	0.4	2.00	2.00	
1,080.0	1.60	131.71	1,080.0	-0.7	0.8	1.1	2.00	2.00	
1,110.0	2.20	131.71	1,110.0	-1.4	1.6	2.1	2.00	2.00	
1,140.0	2.80	131.71	1,139.9	-2.3	2.6	3.4	2.00	2.00	
1,170.0	3.40	131.71	1,169.9	-3.4	3.8	5.0	2.00	2.00	
1,200.0	4.00	131.71	1,199.8	-4.6	5.2	7.0	2.00	2.00	
1,230.0	4.60	131.71	1,229.8	-6.1	6.9	9.2	2.00	2.00	
1,260.0	5.20	131.71	1,259.6	-7.8	8.8	11.8	2.00	2.00	
1,290.0	5.80	131.71	1,289.5	-9.8	10.9	14.7	2.00	2.00	
1,320.0	6.40	131.71	1,319.3	-11.9	13.3	17.9	2.00	2.00	
1,350.0	7.00	131.71	1,349.1	-14.2	15.9	21.4	2.00	2.00	
1,380.0	7.60	131.71	1,378.9	-16.7	18.8	25.2	2.00	2.00	
1,410.0	8.20	131.71	1,408.6	-19.5	21.9	29.3	2.00	2.00	
1,440.0	8.80	131.71	1,438.3	-22.4	25.2	33.7	2.00	2.00	
1,470.0	9.40	131.71	1,467.9	-25.6	28.7	38.5	2.00	2.00	
1,500.0	10.00	131.71	1,497.5	-29.0	32.5	43.5	2.00	2.00	

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Project:	Garfield County	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	**North Reference:**	True
Well:	LR06C D21 595	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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
1,530.0	10.60	131.71	1,527.0	-32.5	36.5	48.9	2.00	2.00	
1,560.0	11.20	131.71	1,556.4	-36.3	40.7	54.6	2.00	2.00	
1,590.0	11.80	131.71	1,585.8	-40.3	45.2	60.5	2.00	2.00	
1,620.0	12.40	131.71	1,615.2	-44.5	49.9	66.8	2.00	2.00	
1,650.0	13.00	131.71	1,644.4	-48.8	54.8	73.4	2.00	2.00	
1,680.0	13.60	131.71	1,673.6	-53.4	60.0	80.3	2.00	2.00	
1,710.0	14.20	131.71	1,702.8	-58.2	65.3	87.5	2.00	2.00	
1,740.0	14.80	131.71	1,731.8	-63.2	71.0	95.0	2.00	2.00	
1,770.0	15.40	131.71	1,760.8	-68.4	76.8	102.8	2.00	2.00	
1,800.0	16.00	131.71	1,789.6	-73.8	82.9	111.0	2.00	2.00	
1,830.0	16.60	131.71	1,818.4	-79.4	89.1	119.4	2.00	2.00	
1,860.0	17.20	131.71	1,847.1	-85.2	95.6	128.1	2.00	2.00	
1,873.1	17.46	131.71	1,859.6	-87.8	98.6	132.0	2.00	2.00	EOB; Inc=17.46°
1,890.0	17.46	131.71	1,875.8	-91.2	102.3	137.1	0.00	0.00	
1,920.0	17.46	131.71	1,904.4	-97.2	109.1	146.1	0.00	0.00	
1,950.0	17.46	131.71	1,933.0	-103.2	115.8	155.1	0.00	0.00	
1,980.0	17.46	131.71	1,961.6	-109.2	122.5	164.1	0.00	0.00	
2,010.0	17.46	131.71	1,990.2	-115.2	129.2	173.1	0.00	0.00	
2,040.0	17.46	131.71	2,018.9	-121.2	136.0	182.1	0.00	0.00	
2,070.0	17.46	131.71	2,047.5	-127.1	142.7	191.1	0.00	0.00	
2,100.0	17.46	131.71	2,076.1	-133.1	149.4	200.1	0.00	0.00	
2,130.0	17.46	131.71	2,104.7	-139.1	156.1	209.1	0.00	0.00	
2,160.0	17.46	131.71	2,133.3	-145.1	162.8	218.1	0.00	0.00	
2,190.0	17.46	131.71	2,161.9	-151.1	169.6	227.1	0.00	0.00	
2,220.0	17.46	131.71	2,190.6	-157.1	176.3	236.1	0.00	0.00	
2,250.0	17.46	131.71	2,219.2	-163.1	183.0	245.1	0.00	0.00	
2,280.0	17.46	131.71	2,247.8	-169.1	189.7	254.1	0.00	0.00	
2,310.0	17.46	131.71	2,276.4	-175.1	196.4	263.1	0.00	0.00	
2,340.0	17.46	131.71	2,305.0	-181.0	203.2	272.1	0.00	0.00	
2,370.0	17.46	131.71	2,333.6	-187.0	209.9	281.1	0.00	0.00	
2,400.0	17.46	131.71	2,362.3	-193.0	216.6	290.1	0.00	0.00	
2,430.0	17.46	131.71	2,390.9	-199.0	223.3	299.1	0.00	0.00	
2,460.0	17.46	131.71	2,419.5	-205.0	230.0	308.1	0.00	0.00	
2,490.0	17.46	131.71	2,448.1	-211.0	236.8	317.1	0.00	0.00	

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
LR06C D21 595 BHL	0.00	0.00	11,906.0	-1,481.0	1,604.8	1,653,559.20	2,278,279.72	39.599867	-108.061609
- plan misses target center by 9640.3ft at 2490.0ft MD (2448.1 TVD, -211.0 N, 236.8 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
LR06C D21 595 TGT	0.00	0.00	8,861.0	-1,461.0	1,639.5	1,653,578.21	2,278,314.96	39.599922	-108.061486
- plan misses target center by 6682.4ft at 2490.0ft MD (2448.1 TVD, -211.0 N, 236.8 E)									
- Point									

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Site:	D21 595 Pad	**North Reference:**	True
Well:	LR06C D21 595	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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	17.46	131.71	2,457.7	-213.0	239.0	320.1	0.00	0.00	
2,600.0	17.46	131.71	2,553.0	-232.9	261.4	350.1	0.00	0.00	
2,700.0	17.46	131.71	2,648.4	-252.9	283.8	380.1	0.00	0.00	
2,800.0	17.46	131.71	2,743.8	-272.9	306.2	410.1	0.00	0.00	
2,900.0	17.46	131.71	2,839.2	-292.8	328.6	440.1	0.00	0.00	
3,000.0	17.46	131.71	2,934.6	-312.8	351.0	470.1	0.00	0.00	
3,100.0	17.46	131.71	3,030.0	-332.8	373.4	500.1	0.00	0.00	
3,200.0	17.46	131.71	3,125.4	-352.7	395.8	530.1	0.00	0.00	
3,300.0	17.46	131.71	3,220.8	-372.7	418.2	560.1	0.00	0.00	
3,400.0	17.46	131.71	3,316.2	-392.7	440.6	590.1	0.00	0.00	
3,500.0	17.46	131.71	3,411.6	-412.6	463.0	620.1	0.00	0.00	
3,600.0	17.46	131.71	3,507.0	-432.6	485.4	650.1	0.00	0.00	
3,700.0	17.46	131.71	3,602.4	-452.5	507.8	680.1	0.00	0.00	
3,800.0	17.46	131.71	3,697.8	-472.5	530.2	710.1	0.00	0.00	
3,900.0	17.46	131.71	3,793.1	-492.5	552.6	740.1	0.00	0.00	
4,000.0	17.46	131.71	3,888.5	-512.4	575.0	770.1	0.00	0.00	
4,070.7	17.46	131.71	3,956.0	-526.6	590.9	791.3	0.00	0.00	Wasatch
4,100.0	17.46	131.71	3,983.9	-532.4	597.4	800.1	0.00	0.00	
4,200.0	17.46	131.71	4,079.3	-552.4	619.8	830.1	0.00	0.00	
4,300.0	17.46	131.71	4,174.7	-572.3	642.2	860.1	0.00	0.00	
4,400.0	17.46	131.71	4,270.1	-592.3	664.6	890.1	0.00	0.00	
4,500.0	17.46	131.71	4,365.5	-612.3	687.0	920.1	0.00	0.00	
4,600.0	17.46	131.71	4,460.9	-632.2	709.4	950.1	0.00	0.00	
4,700.0	17.46	131.71	4,556.3	-652.2	731.8	980.1	0.00	0.00	
4,800.0	17.46	131.71	4,651.7	-672.1	754.2	1,010.1	0.00	0.00	
4,900.0	17.46	131.71	4,747.1	-692.1	776.6	1,040.1	0.00	0.00	
5,000.0	17.46	131.71	4,842.5	-712.1	799.0	1,070.1	0.00	0.00	
5,100.0	17.46	131.71	4,937.8	-732.0	821.5	1,100.1	0.00	0.00	
5,200.0	17.46	131.71	5,033.2	-752.0	843.9	1,130.1	0.00	0.00	
5,300.0	17.46	131.71	5,128.6	-772.0	866.3	1,160.1	0.00	0.00	
5,400.0	17.46	131.71	5,224.0	-791.9	888.7	1,190.1	0.00	0.00	
5,500.0	17.46	131.71	5,319.4	-811.9	911.1	1,220.1	0.00	0.00	
5,600.0	17.46	131.71	5,414.8	-831.9	933.5	1,250.1	0.00	0.00	
5,643.2	17.46	131.71	5,456.0	-840.5	943.1	1,263.1	0.00	0.00	Fort Union
5,700.0	17.46	131.71	5,510.2	-851.8	955.9	1,280.1	0.00	0.00	
5,800.0	17.46	131.71	5,605.6	-871.8	978.3	1,310.1	0.00	0.00	
5,900.0	17.46	131.71	5,701.0	-891.7	1,000.7	1,340.1	0.00	0.00	
6,000.0	17.46	131.71	5,796.4	-911.7	1,023.1	1,370.2	0.00	0.00	
6,100.0	17.46	131.71	5,891.8	-931.7	1,045.5	1,400.2	0.00	0.00	
6,200.0	17.46	131.71	5,987.2	-951.6	1,067.9	1,430.2	0.00	0.00	
6,300.0	17.46	131.71	6,082.5	-971.6	1,090.3	1,460.2	0.00	0.00	
6,400.0	17.46	131.71	6,177.9	-991.6	1,112.7	1,490.2	0.00	0.00	
6,500.0	17.46	131.71	6,273.3	-1,011.5	1,135.1	1,520.2	0.00	0.00	
6,600.0	17.46	131.71	6,368.7	-1,031.5	1,157.5	1,550.2	0.00	0.00	
6,700.0	17.46	131.71	6,464.1	-1,051.5	1,179.9	1,580.2	0.00	0.00	
6,800.0	17.46	131.71	6,559.5	-1,071.4	1,202.3	1,610.2	0.00	0.00	
6,900.0	17.46	131.71	6,654.9	-1,091.4	1,224.7	1,640.2	0.00	0.00	
7,000.0	17.46	131.71	6,750.3	-1,111.3	1,247.1	1,670.2	0.00	0.00	
7,100.0	17.46	131.71	6,845.7	-1,131.3	1,269.5	1,700.2	0.00	0.00	
7,200.0	17.46	131.71	6,941.1	-1,151.3	1,291.9	1,730.2	0.00	0.00	
7,300.0	17.46	131.71	7,036.5	-1,171.2	1,314.3	1,760.2	0.00	0.00	
7,400.0	17.46	131.71	7,131.9	-1,191.2	1,336.7	1,790.2	0.00	0.00	

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well LR06C D21 595
Company:	Berry Petroleum Company (NAD 83)	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	**North Reference:**	True
Well:	LR06C D21 595	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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
7,500.0	17.46	131.71	7,227.3	-1,211.2	1,359.1	1,820.2	0.00	0.00	
7,600.0	17.46	131.71	7,322.6	-1,231.1	1,381.5	1,850.2	0.00	0.00	
7,700.0	17.46	131.71	7,418.0	-1,251.1	1,403.9	1,880.2	0.00	0.00	
7,800.0	17.46	131.71	7,513.4	-1,271.1	1,426.3	1,910.2	0.00	0.00	
7,900.0	17.46	131.71	7,608.8	-1,291.0	1,448.7	1,940.2	0.00	0.00	
8,000.0	17.46	131.71	7,704.2	-1,311.0	1,471.1	1,970.2	0.00	0.00	
8,100.0	17.46	131.71	7,799.6	-1,330.9	1,493.5	2,000.2	0.00	0.00	
8,200.0	17.46	131.71	7,895.0	-1,350.9	1,515.9	2,030.2	0.00	0.00	
8,300.0	17.46	131.71	7,990.4	-1,370.9	1,538.3	2,060.2	0.00	0.00	
8,311.5	17.46	131.71	8,001.4	-1,373.2	1,540.9	2,063.7	0.00	0.00	Start Drop -2.00
8,400.0	15.69	131.71	8,086.2	-1,390.0	1,559.7	2,088.9	2.00	-2.00	
8,500.0	13.69	131.71	8,182.9	-1,406.8	1,578.7	2,114.2	2.00	-2.00	
8,575.0	12.19	131.71	8,256.0	-1,418.0	1,591.2	2,131.0	2.00	-2.00	Ohio Creek
8,600.0	11.69	131.71	8,280.5	-1,421.5	1,595.1	2,136.2	2.00	-2.00	
8,700.0	9.69	131.71	8,378.7	-1,433.8	1,608.9	2,154.8	2.00	-2.00	
8,800.0	7.69	131.71	8,477.6	-1,443.9	1,620.2	2,169.9	2.00	-2.00	
8,879.0	6.11	131.71	8,556.0	-1,450.2	1,627.3	2,179.4	2.00	-2.00	Williams Fork
8,900.0	5.69	131.71	8,576.9	-1,451.6	1,628.9	2,181.5	2.00	-2.00	
9,000.0	3.69	131.71	8,676.5	-1,457.0	1,635.0	2,189.7	2.00	-2.00	
9,100.0	1.69	131.71	8,776.4	-1,460.2	1,638.5	2,194.4	2.00	-2.00	
9,179.6	0.10	131.71	8,856.0	-1,461.0	1,639.4	2,195.6	2.00	-2.00	Approx TOG
9,184.6	0.00	0.00	8,861.0	-1,461.0	1,639.5	2,195.6	2.00	-2.00	EOD; Inc=0° - LR06C D21 595 TGT
9,200.0	0.04	240.04	8,876.4	-1,461.0	1,639.4	2,195.6	0.25	0.25	
9,300.0	0.29	240.04	8,976.4	-1,461.1	1,639.2	2,195.6	0.25	0.25	
9,400.0	0.54	240.04	9,076.4	-1,461.5	1,638.6	2,195.3	0.25	0.25	
9,500.0	0.79	240.04	9,176.4	-1,462.1	1,637.6	2,195.0	0.25	0.25	
9,502.5	0.79	240.04	9,178.9	-1,462.1	1,637.5	2,195.0	0.25	0.25	
9,600.0	0.79	240.04	9,276.4	-1,462.8	1,636.4	2,194.6	0.00	0.00	
9,700.0	0.79	240.04	9,376.4	-1,463.5	1,635.2	2,194.2	0.00	0.00	
9,800.0	0.79	240.04	9,476.4	-1,464.2	1,634.0	2,193.8	0.00	0.00	
9,900.0	0.79	240.04	9,576.4	-1,464.9	1,632.8	2,193.3	0.00	0.00	
10,000.0	0.79	240.04	9,676.3	-1,465.5	1,631.6	2,192.9	0.00	0.00	
10,100.0	0.79	240.04	9,776.3	-1,466.2	1,630.4	2,192.5	0.00	0.00	
10,200.0	0.79	240.04	9,876.3	-1,466.9	1,629.2	2,192.1	0.00	0.00	
10,300.0	0.79	240.04	9,976.3	-1,467.6	1,628.0	2,191.7	0.00	0.00	
10,400.0	0.79	240.04	10,076.3	-1,468.3	1,626.8	2,191.3	0.00	0.00	
10,500.0	0.79	240.04	10,176.3	-1,469.0	1,625.6	2,190.9	0.00	0.00	
10,600.0	0.79	240.04	10,276.3	-1,469.7	1,624.4	2,190.5	0.00	0.00	
10,700.0	0.79	240.04	10,376.3	-1,470.4	1,623.1	2,190.0	0.00	0.00	
10,800.0	0.79	240.04	10,476.3	-1,471.1	1,621.9	2,189.6	0.00	0.00	
10,900.0	0.79	240.04	10,576.3	-1,471.8	1,620.7	2,189.2	0.00	0.00	
11,000.0	0.79	240.04	10,676.2	-1,472.5	1,619.5	2,188.8	0.00	0.00	
11,100.0	0.79	240.04	10,776.2	-1,473.2	1,618.3	2,188.4	0.00	0.00	
11,200.0	0.79	240.04	10,876.2	-1,473.9	1,617.1	2,188.0	0.00	0.00	
11,300.0	0.79	240.04	10,976.2	-1,474.6	1,615.9	2,187.6	0.00	0.00	
11,400.0	0.79	240.04	11,076.2	-1,475.2	1,614.7	2,187.1	0.00	0.00	
11,500.0	0.79	240.04	11,176.2	-1,475.9	1,613.5	2,186.7	0.00	0.00	
11,600.0	0.79	240.04	11,276.2	-1,476.6	1,612.3	2,186.3	0.00	0.00	
11,700.0	0.79	240.04	11,376.2	-1,477.3	1,611.1	2,185.9	0.00	0.00	
11,729.8	0.79	240.04	11,406.0	-1,477.5	1,610.8	2,185.8	0.00	0.00	Cameo
11,800.0	0.79	240.04	11,476.2	-1,478.0	1,609.9	2,185.5	0.00	0.00	
11,900.0	0.79	240.04	11,576.2	-1,478.7	1,608.7	2,185.1	0.00	0.00	

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well LR06C D21 595
Company:	Berry Petroleum Company (NAD 83)	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Project:	Garfield County	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site:	D21 595 Pad	**North Reference:**	True
Well:	LR06C D21 595	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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	240.04	11,676.2	-1,479.4	1,607.5	2,184.7	0.00	0.00	
12,079.9	0.79	240.04	11,756.0	-1,480.0	1,606.6	2,184.3	0.00	0.00	Rollins SS
12,100.0	0.79	240.04	11,776.1	-1,480.1	1,606.3	2,184.2	0.00	0.00	
12,200.0	0.79	240.04	11,876.1	-1,480.8	1,605.1	2,183.8	0.00	0.00	
12,229.9	0.79	240.04	11,906.0	-1,481.0	1,604.8	2,183.7	0.00	0.00	LR06C D21 595 BHL

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
LR06C D21 595 BHL - plan hits target center - Rectangle (sides W50.0 H100.0 D0.0)	0.00	0.00	11,906.0	-1,481.0	1,604.8	1,653,559.20	2,278,279.72	39.599867	-108.061609
LR06C D21 595 TGT - plan hits target center - Point	0.00	0.00	8,861.0	-1,461.0	1,639.5	1,653,578.21	2,278,314.96	39.599922	-108.061486

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,070.7	3,956.0	Wasatch		0.00	
5,643.2	5,456.0	Fort Union		0.00	
8,575.0	8,256.0	Ohio Creek		0.00	
8,879.0	8,556.0	Williams Fork		0.00	
9,179.6	8,856.0	Approx TOG		0.00	
11,729.8	11,406.0	Cameo		0.00	
12,079.9	11,756.0	Rollins SS		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,000.0	1,000.0	0.0	0.0	KOP @ 1000' MD
1,873.1	1,859.6	-87.8	98.6	EOB; Inc=17.46°
8,311.5	8,001.4	-1,373.2	1,540.9	Start Drop -2.00
9,184.6	8,861.0	-1,461.0	1,639.5	EOD; Inc=0°
12,229.9	11,906.0	-1,481.0	1,604.8	TD at 12229.9

Berry Petroleum Company (NAD 83)

Garfield County
D21 595 Pad
LR06C D21 595
DD
Plan #2

Anticollision Report

03 December, 2010

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Reference Plan #2

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 1,399.5ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 12/3/2010

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	12,229.9	Plan #2 (DD)	MWD	Geolink MWD

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
D21 595 Pad						
LR03C D21 595 - DD - Plan #2	200.0	200.0	60.0	59.3	92.891	CC, ES
LR03C D21 595 - DD - Plan #2	2,900.0	2,854.1	267.9	250.4	15.303	SF
LR04A D21 595 - DD - Plan #2	525.9	526.2	28.6	26.8	15.929	CC, ES
LR04A D21 595 - DD - Plan #2	700.0	698.9	34.2	31.8	14.275	SF
LR04B D21 595 - DD - Plan #2	300.0	300.0	60.0	59.0	60.297	CC, ES
LR04B D21 595 - DD - Plan #2	800.0	793.2	80.4	77.7	29.464	SF
LR04C D21 595 (Existing) - DD - DD	1,207.8	1,209.3	77.4	73.0	17.644	CC, ES
LR04C D21 595 (Existing) - DD - DD	1,400.0	1,399.4	84.3	79.2	16.465	SF
LR04D D21 595 - DD - Plan #2	200.0	200.0	15.1	14.5	23.430	CC, ES
LR04D D21 595 - DD - Plan #2	400.0	398.9	21.7	20.4	15.846	SF
LR05A D21 595 - DD - Plan #2	535.4	535.6	11.3	9.4	6.150	CC, ES
LR05A D21 595 - DD - Plan #2	600.0	600.0	12.8	10.7	6.094	SF
LR05B D21 595 (Existing) - DD - DD	1,256.1	1,262.1	108.5	103.9	23.518	CC, ES
LR05B D21 595 (Existing) - DD - DD	1,600.0	1,602.6	128.8	122.7	21.004	SF
LR05BDR D21-595 - DD - Plan #2	773.2	775.4	77.4	74.6	27.648	CC
LR05BDR D21-595 - DD - Plan #2	800.0	802.0	77.5	74.6	26.589	ES
LR05BDR D21-595 - DD - Plan #2	1,700.0	1,697.3	131.6	124.4	18.179	SF
LR05C D21 595 - DD - Plan #2	592.8	594.0	35.8	33.7	17.087	CC
LR05C D21 595 - DD - Plan #2	600.0	601.2	35.8	33.7	16.830	ES
LR05C D21 595 - DD - Plan #2	2,200.0	2,184.6	157.6	145.9	13.453	SF
LR05D D21 595 - DD - Plan #2	660.5	662.5	64.9	62.5	27.317	CC, ES
LR05D D21 595 - DD - Plan #2	2,600.0	2,574.1	285.3	269.7	18.336	SF
LR06B D21 595 - DD - Plan #2	500.0	500.0	45.1	43.4	26.653	CC, ES
LR06B D21 595 - DD - Plan #2	2,900.0	2,872.2	123.3	105.1	6.782	SF
LR06D D21 595 - DD - Plan #2	200.0	200.0	30.0	29.3	46.445	CC, ES
LR06D D21 595 - DD - Plan #2	6,100.0	6,055.7	273.4	219.3	5.052	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR03C D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	108.41	-18.9	56.9	60.0				
100.0	100.0	100.0	100.0	0.1	0.1	108.41	-18.9	56.9	60.0	59.7	0.30	202.173	
200.0	200.0	200.0	200.0	0.3	0.3	108.41	-18.9	56.9	60.0	59.3	0.65	92.891	CC, ES
300.0	300.0	298.0	297.9	0.5	0.5	108.05	-19.1	58.6	61.7	60.7	0.99	62.019	
400.0	400.0	395.7	395.5	0.7	0.7	107.09	-19.5	63.6	66.7	65.3	1.35	49.222	
500.0	500.0	493.0	492.5	0.8	0.9	105.78	-20.3	71.8	75.0	73.3	1.73	43.255	
600.0	600.0	589.6	588.4	1.0	1.2	104.38	-21.3	83.3	86.7	84.6	2.14	40.539	
700.0	700.0	685.9	683.5	1.2	1.5	103.05	-22.7	97.8	101.7	99.2	2.57	39.640	
800.0	800.0	784.5	780.9	1.4	1.8	101.97	-24.1	113.9	117.9	114.9	3.01	39.209	
900.0	900.0	883.2	878.2	1.5	2.1	101.15	-25.6	129.9	134.2	130.7	3.45	38.869	
1,000.0	1,000.0	981.8	975.5	1.7	2.4	100.50	-27.1	145.9	150.4	146.5	3.90	38.595	
1,100.0	1,100.0	1,080.7	1,073.1	1.9	2.7	-31.89	-28.5	162.0	165.2	161.5	3.76	43.947	
1,200.0	1,199.8	1,179.9	1,170.9	2.1	3.1	-33.07	-30.0	178.2	177.2	173.1	4.11	43.131	
1,300.0	1,299.5	1,279.3	1,269.0	2.3	3.4	-34.72	-31.5	194.3	186.3	181.9	4.46	41.787	
1,400.0	1,398.7	1,378.8	1,367.2	2.5	3.7	-36.84	-32.9	210.5	192.9	188.0	4.82	39.994	
1,500.0	1,497.5	1,478.3	1,465.4	2.7	4.1	-39.47	-34.4	226.7	196.9	191.7	5.21	37.795	
1,600.0	1,595.6	1,577.7	1,563.4	3.0	4.4	-42.68	-35.9	242.9	198.9	193.2	5.65	35.216	
1,700.0	1,693.1	1,676.7	1,661.1	3.4	4.7	-46.53	-37.4	259.0	199.0	192.8	6.16	32.296	
1,800.0	1,789.6	1,775.4	1,758.5	3.8	5.0	-51.13	-38.8	275.0	197.8	191.0	6.79	29.114	
1,900.0	1,885.3	1,873.6	1,855.4	4.3	5.4	-56.52	-40.3	291.0	196.1	188.5	7.58	25.867	
1,968.2	1,950.4	1,940.5	1,921.4	4.6	5.6	-60.36	-41.3	301.9	195.6	187.5	8.19	23.890	
2,000.0	1,980.7	1,971.7	1,952.1	4.8	5.7	-62.16	-41.7	307.0	195.7	187.3	8.49	23.065	
2,100.0	2,076.1	2,069.7	2,048.8	5.3	6.0	-67.76	-43.2	322.9	197.3	187.9	9.48	20.822	
2,200.0	2,171.5	2,167.8	2,145.6	5.8	6.4	-73.22	-44.6	338.9	200.9	190.3	10.52	19.087	
2,300.0	2,266.9	2,265.8	2,242.3	6.3	6.7	-78.46	-46.1	354.8	206.2	194.6	11.59	17.787	
2,400.0	2,362.3	2,363.9	2,339.0	6.8	7.0	-83.40	-47.5	370.8	213.2	200.6	12.66	16.843	
2,500.0	2,457.7	2,461.9	2,435.8	7.4	7.4	-88.00	-49.0	386.7	221.8	208.1	13.71	16.183	
2,600.0	2,553.0	2,560.0	2,532.5	7.9	7.7	-92.25	-50.5	402.7	231.7	217.0	14.72	15.744	
2,700.0	2,648.4	2,658.0	2,629.2	8.4	8.0	-96.14	-51.9	418.6	242.8	227.1	15.69	15.477	
2,800.0	2,743.8	2,756.1	2,726.0	9.0	8.3	-99.68	-53.4	434.6	254.9	238.3	16.62	15.340	
2,900.0	2,839.2	2,854.1	2,822.7	9.5	8.7	-102.90	-54.8	450.5	267.9	250.4	17.51	15.303	SF
3,000.0	2,934.6	2,952.2	2,919.4	10.1	9.0	-105.82	-56.3	466.5	281.7	263.4	18.36	15.342	
3,100.0	3,030.0	3,050.2	3,016.2	10.6	9.3	-108.46	-57.7	482.4	296.2	277.0	19.18	15.438	
3,200.0	3,125.4	3,148.3	3,112.9	11.2	9.7	-110.86	-59.2	498.4	311.2	291.2	19.98	15.577	
3,300.0	3,220.8	3,246.3	3,209.6	11.7	10.0	-113.04	-60.6	514.3	326.7	306.0	20.75	15.747	
3,400.0	3,316.2	3,344.4	3,306.4	12.3	10.3	-115.02	-62.1	530.3	342.7	321.2	21.50	15.941	
3,500.0	3,411.6	3,442.4	3,403.1	12.8	10.7	-116.82	-63.5	546.2	359.0	336.7	22.23	16.151	
3,600.0	3,507.0	3,540.5	3,499.8	13.4	11.0	-118.47	-65.0	562.2	375.6	352.6	22.94	16.372	
3,700.0	3,602.4	3,638.5	3,596.6	14.0	11.3	-119.98	-66.4	578.1	392.5	368.9	23.64	16.602	
3,800.0	3,697.8	3,736.6	3,693.3	14.5	11.6	-121.36	-67.9	594.1	409.6	385.3	24.33	16.835	
3,900.0	3,793.1	3,834.6	3,790.0	15.1	12.0	-122.63	-69.3	610.0	427.0	402.0	25.01	17.071	
4,000.0	3,888.5	3,932.7	3,886.8	15.6	12.3	-123.81	-70.8	626.0	444.6	418.9	25.69	17.307	
4,100.0	3,983.9	4,030.8	3,983.5	16.2	12.6	-124.89	-72.3	641.9	462.3	435.9	26.35	17.541	
4,200.0	4,079.3	4,128.8	4,080.2	16.8	13.0	-125.90	-73.7	657.9	480.2	453.1	27.02	17.774	
4,300.0	4,174.7	4,226.9	4,177.0	17.3	13.3	-126.83	-75.2	673.8	498.2	470.5	27.67	18.003	
4,400.0	4,270.1	4,324.9	4,273.7	17.9	13.6	-127.70	-76.6	689.8	516.3	488.0	28.32	18.229	
4,500.0	4,365.5	4,423.0	4,370.4	18.4	14.0	-128.51	-78.1	705.7	534.5	505.6	28.97	18.451	
4,600.0	4,460.9	4,521.0	4,467.2	19.0	14.3	-129.26	-79.5	721.7	552.9	523.3	29.61	18.669	
4,700.0	4,556.3	4,619.1	4,563.9	19.6	14.6	-129.97	-81.0	737.6	571.3	541.0	30.26	18.881	
4,800.0	4,651.7	4,717.1	4,660.6	20.1	15.0	-130.64	-82.4	753.6	589.8	558.9	30.90	19.089	
4,900.0	4,747.1	4,815.2	4,757.4	20.7	15.3	-131.26	-83.9	769.5	608.4	576.8	31.53	19.292	
5,000.0	4,842.5	4,913.2	4,854.1	21.2	15.6	-131.85	-85.3	785.5	627.0	594.8	32.17	19.490	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR03C D21 595 - DD - Plan #2

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,937.8	5,011.3	4,950.8	21.8	15.9	-132.40	-86.8	801.4	645.7	612.9	32.80	19.684	
5,200.0	5,033.2	5,109.3	5,047.6	22.4	16.3	-132.92	-88.2	817.4	664.4	631.0	33.44	19.872	
5,300.0	5,128.6	5,207.4	5,144.3	22.9	16.6	-133.41	-89.7	833.3	683.2	649.2	34.07	20.056	
5,400.0	5,224.0	5,305.4	5,241.0	23.5	16.9	-133.88	-91.2	849.3	702.1	667.4	34.70	20.235	
5,500.0	5,319.4	5,403.5	5,337.8	24.0	17.3	-134.32	-92.6	865.2	721.0	685.7	35.33	20.409	
5,600.0	5,414.8	5,501.5	5,434.5	24.6	17.6	-134.74	-94.1	881.2	739.9	704.0	35.95	20.579	
5,700.0	5,510.2	5,599.6	5,531.3	25.2	17.9	-135.14	-95.5	897.1	758.9	722.3	36.58	20.744	
5,800.0	5,605.6	5,697.6	5,628.0	25.7	18.3	-135.52	-97.0	913.1	777.9	740.7	37.21	20.906	
5,900.0	5,701.0	5,795.7	5,724.7	26.3	18.6	-135.88	-98.4	929.0	796.9	759.1	37.84	21.063	
6,000.0	5,796.4	5,893.7	5,821.5	26.9	18.9	-136.23	-99.9	945.0	816.0	777.5	38.46	21.215	
6,100.0	5,891.8	5,991.8	5,918.2	27.4	19.3	-136.56	-101.3	960.9	835.1	796.0	39.09	21.364	
6,200.0	5,987.2	6,089.8	6,014.9	28.0	19.6	-136.87	-102.8	976.9	854.2	814.5	39.71	21.509	
6,300.0	6,082.5	6,187.9	6,111.7	28.5	19.9	-137.17	-104.2	992.8	873.3	833.0	40.34	21.651	
6,400.0	6,177.9	6,285.9	6,208.4	29.1	20.2	-137.46	-105.7	1,008.8	892.5	851.5	40.96	21.789	
6,500.0	6,273.3	6,384.0	6,305.1	29.7	20.6	-137.73	-107.1	1,024.7	911.6	870.1	41.58	21.923	
6,600.0	6,368.7	6,482.0	6,401.9	30.2	20.9	-138.00	-108.6	1,040.7	930.8	888.6	42.21	22.054	
6,700.0	6,464.1	6,580.1	6,498.6	30.8	21.2	-138.25	-110.1	1,056.6	950.1	907.2	42.83	22.182	
6,800.0	6,559.5	6,678.1	6,595.3	31.4	21.6	-138.50	-111.5	1,072.6	969.3	925.8	43.45	22.306	
6,900.0	6,654.9	6,776.2	6,692.1	31.9	21.9	-138.73	-113.0	1,088.5	988.6	944.5	44.08	22.428	
7,000.0	6,750.3	6,874.2	6,788.8	32.5	22.2	-138.95	-114.4	1,104.5	1,007.8	963.1	44.70	22.546	
7,100.0	6,845.7	6,972.3	6,885.5	33.0	22.6	-139.17	-115.9	1,120.4	1,027.1	981.8	45.32	22.662	
7,200.0	6,941.1	7,070.3	6,982.3	33.6	22.9	-139.38	-117.3	1,136.4	1,046.4	1,000.5	45.94	22.775	
7,300.0	7,036.5	7,168.4	7,079.0	34.2	23.2	-139.58	-118.8	1,152.3	1,065.7	1,019.1	46.57	22.885	
7,400.0	7,131.9	7,266.4	7,175.7	34.7	23.6	-139.77	-120.2	1,168.3	1,085.0	1,037.8	47.19	22.993	
7,500.0	7,227.3	7,364.5	7,272.5	35.3	23.9	-139.96	-121.7	1,184.2	1,104.4	1,056.5	47.81	23.098	
7,600.0	7,322.6	7,462.5	7,369.2	35.9	24.2	-140.14	-123.1	1,200.2	1,123.7	1,075.3	48.43	23.201	
7,700.0	7,418.0	7,560.6	7,465.9	36.4	24.5	-140.32	-124.6	1,216.1	1,143.1	1,094.0	49.06	23.301	
7,800.0	7,513.4	7,658.6	7,562.7	37.0	24.9	-140.49	-126.0	1,232.1	1,162.4	1,112.7	49.68	23.399	
7,900.0	7,608.8	7,756.7	7,659.4	37.5	25.2	-140.65	-127.5	1,248.0	1,181.8	1,131.5	50.30	23.495	
8,000.0	7,704.2	7,854.7	7,756.1	38.1	25.5	-140.81	-128.9	1,264.0	1,201.2	1,150.2	50.92	23.589	
8,100.0	7,799.6	7,952.8	7,852.9	38.7	25.9	-140.96	-130.4	1,279.9	1,220.6	1,169.0	51.54	23.681	
8,200.0	7,895.0	8,050.8	7,949.6	39.2	26.2	-141.11	-131.9	1,295.9	1,240.0	1,187.8	52.16	23.770	
8,300.0	7,990.4	8,148.9	8,046.3	39.8	26.5	-141.25	-133.3	1,311.8	1,259.4	1,206.6	52.79	23.858	
8,400.0	8,086.2	8,247.2	8,143.3	40.3	26.9	-141.56	-134.8	1,327.8	1,277.7	1,224.3	53.40	23.927	
8,500.0	8,182.9	8,345.9	8,240.7	40.8	27.2	-141.76	-136.2	1,343.9	1,293.4	1,239.4	54.03	23.938	
8,600.0	8,280.5	8,445.0	8,338.5	41.2	27.5	-141.82	-137.7	1,360.0	1,306.4	1,251.7	54.68	23.890	
8,700.0	8,378.7	8,536.8	8,429.1	41.5	27.8	-141.81	-139.0	1,374.2	1,316.9	1,261.6	55.28	23.822	
8,800.0	8,477.6	8,625.4	8,517.0	41.8	28.0	-141.80	-140.0	1,385.4	1,325.4	1,269.6	55.77	23.766	
8,900.0	8,576.9	8,714.2	8,605.4	42.0	28.2	-141.81	-140.8	1,393.9	1,332.0	1,275.8	56.16	23.717	
9,000.0	8,676.5	8,800.0	8,691.0	42.2	28.4	-141.82	-141.3	1,399.5	1,336.7	1,280.3	56.46	23.675	
9,100.0	8,776.4	8,892.0	8,783.0	42.3	28.5	-141.84	-141.6	1,402.7	1,339.5	1,282.8	56.67	23.636	
9,200.0	8,876.4	8,986.3	8,877.2	42.4	28.6	109.80	-141.7	1,403.1	1,340.3	1,283.5	56.83	23.587	
9,300.0	8,976.4	9,088.3	8,979.3	42.4	28.7	109.80	-141.9	1,402.8	1,340.3	1,283.3	57.01	23.511	
9,400.0	9,076.4	9,190.3	9,081.3	42.5	28.7	109.79	-142.3	1,402.0	1,340.3	1,283.1	57.18	23.440	
9,500.0	9,176.4	9,291.8	9,182.7	42.5	28.8	109.79	-142.9	1,400.9	1,340.2	1,282.9	57.34	23.373	
9,600.0	9,276.4	9,391.8	9,282.7	42.6	28.9	109.79	-143.6	1,399.7	1,340.2	1,282.7	57.50	23.306	
9,700.0	9,376.4	9,491.8	9,382.7	42.7	29.0	109.79	-144.3	1,398.5	1,340.2	1,282.5	57.67	23.240	
9,800.0	9,476.4	9,591.8	9,482.7	42.7	29.1	109.79	-145.0	1,397.3	1,340.2	1,282.4	57.84	23.172	
9,900.0	9,576.4	9,691.8	9,582.7	42.8	29.2	109.79	-145.7	1,396.1	1,340.2	1,282.2	58.00	23.105	
10,000.0	9,676.3	9,791.8	9,682.7	42.9	29.3	109.79	-146.4	1,394.9	1,340.2	1,282.0	58.18	23.037	
10,100.0	9,776.3	9,891.8	9,782.7	42.9	29.3	109.79	-147.1	1,393.7	1,340.2	1,281.9	58.35	22.970	
10,200.0	9,876.3	9,991.8	9,882.6	43.0	29.4	109.79	-147.8	1,392.5	1,340.2	1,281.7	58.52	22.902	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR03C D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	9,976.3	10,091.8	9,982.6	43.1	29.5	109.79	-148.5	1,391.3	1,340.2	1,281.5	58.70	22.833	
10,400.0	10,076.3	10,191.8	10,082.6	43.1	29.6	109.79	-149.2	1,390.1	1,340.2	1,281.3	58.87	22.765	
10,500.0	10,176.3	10,291.8	10,182.6	43.2	29.7	109.79	-149.9	1,388.9	1,340.2	1,281.2	59.05	22.696	
10,600.0	10,276.3	10,391.8	10,282.6	43.3	29.8	109.79	-150.6	1,387.7	1,340.2	1,281.0	59.23	22.627	
10,700.0	10,376.3	10,491.8	10,382.6	43.3	29.9	109.79	-151.3	1,386.6	1,340.2	1,280.8	59.41	22.558	
10,800.0	10,476.3	10,591.8	10,482.6	43.4	30.0	109.79	-152.0	1,385.4	1,340.2	1,280.6	59.59	22.489	
10,900.0	10,576.3	10,691.8	10,582.6	43.5	30.1	109.79	-152.6	1,384.2	1,340.2	1,280.4	59.78	22.419	
11,000.0	10,676.2	10,791.8	10,682.6	43.5	30.1	109.79	-153.3	1,383.0	1,340.2	1,280.2	59.96	22.350	
11,100.0	10,776.2	10,891.8	10,782.6	43.6	30.2	109.79	-154.0	1,381.8	1,340.2	1,280.0	60.15	22.280	
11,200.0	10,876.2	10,991.8	10,882.5	43.7	30.3	109.79	-154.7	1,380.6	1,340.2	1,279.9	60.34	22.211	
11,300.0	10,976.2	11,091.8	10,982.5	43.7	30.4	109.79	-155.4	1,379.4	1,340.2	1,279.7	60.53	22.141	
11,400.0	11,076.2	11,191.8	11,082.5	43.8	30.5	109.79	-156.1	1,378.2	1,340.2	1,279.5	60.72	22.071	
11,500.0	11,176.2	11,291.8	11,182.5	43.9	30.6	109.79	-156.8	1,377.0	1,340.2	1,279.3	60.92	22.001	
11,600.0	11,276.2	11,391.8	11,282.5	44.0	30.7	109.79	-157.5	1,375.8	1,340.2	1,279.1	61.11	21.931	
11,700.0	11,376.2	11,491.8	11,382.5	44.0	30.8	109.79	-158.2	1,374.6	1,340.2	1,278.9	61.31	21.861	
11,800.0	11,476.2	11,591.8	11,482.5	44.1	30.9	109.79	-158.9	1,373.4	1,340.2	1,278.7	61.50	21.790	
11,900.0	11,576.2	11,691.8	11,582.5	44.2	31.0	109.79	-159.6	1,372.2	1,340.2	1,278.5	61.70	21.720	
12,000.0	11,676.2	11,791.8	11,682.5	44.3	31.1	109.79	-160.3	1,371.0	1,340.2	1,278.3	61.90	21.650	
12,100.0	11,776.1	11,891.8	11,782.5	44.3	31.2	109.79	-161.0	1,369.8	1,340.2	1,278.1	62.10	21.580	
12,200.0	11,876.1	11,991.8	11,882.4	44.4	31.3	109.79	-161.7	1,368.6	1,340.2	1,277.9	62.31	21.510	
12,203.4	11,879.6	11,995.2	11,885.9	44.4	31.3	109.79	-161.7	1,368.6	1,340.2	1,277.9	62.31	21.507	
12,229.9	11,906.0	11,995.3	11,886.0	44.4	31.3	109.79	-161.7	1,368.6	1,340.4	1,278.1	62.34	21.502	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR04A D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-71.59	9.5	-28.5	30.0				
100.0	100.0	100.0	100.0	0.1	0.1	-71.59	9.5	-28.5	30.0	29.7	0.30	101.087	
200.0	200.0	200.0	200.0	0.3	0.3	-71.59	9.5	-28.5	30.0	29.3	0.65	46.445	
300.0	300.0	300.0	300.0	0.5	0.5	-71.59	9.5	-28.5	30.0	29.0	0.99	30.149	
400.0	400.0	400.3	400.3	0.7	0.7	-68.34	10.9	-27.4	29.5	28.2	1.35	21.927	
500.0	500.0	500.3	500.1	0.8	0.9	-58.13	15.2	-24.4	28.7	27.0	1.70	16.847	
525.9	525.9	526.2	525.9	0.9	0.9	-54.28	16.7	-23.2	28.6	26.8	1.80	15.929	CC, ES
600.0	600.0	599.8	599.3	1.0	1.1	-41.01	22.2	-19.3	29.4	27.4	2.06	14.310	
700.0	700.0	698.9	697.7	1.2	1.3	-21.46	31.7	-12.5	34.2	31.8	2.39	14.275	SF
800.0	800.0	798.2	796.2	1.4	1.6	-7.27	41.7	-5.3	42.2	39.4	2.74	15.398	
900.0	900.0	897.4	894.7	1.5	1.8	2.03	51.6	1.8	51.9	48.8	3.10	16.719	
1,000.0	1,000.0	996.7	993.1	1.7	2.1	8.30	61.5	9.0	62.6	59.1	3.49	17.951	
1,100.0	1,100.0	1,095.8	1,091.6	1.9	2.4	-119.96	71.5	16.1	74.6	70.8	3.87	19.303	
1,200.0	1,199.8	1,194.9	1,189.8	2.1	2.6	-119.40	81.4	23.3	88.5	84.3	4.23	20.928	
1,300.0	1,299.5	1,293.6	1,287.8	2.3	2.9	-120.59	91.3	30.4	104.1	99.5	4.61	22.558	
1,400.0	1,398.7	1,391.9	1,385.4	2.5	3.2	-122.79	101.2	37.5	121.6	116.6	5.03	24.183	
1,500.0	1,497.5	1,489.8	1,482.5	2.7	3.4	-125.50	111.0	44.5	141.2	135.8	5.47	25.818	
1,600.0	1,595.6	1,586.9	1,578.9	3.0	3.7	-128.43	120.7	51.5	163.3	157.3	5.94	27.491	
1,700.0	1,693.1	1,683.3	1,674.5	3.4	4.0	-131.35	130.4	58.5	188.0	181.5	6.43	29.228	
1,800.0	1,789.6	1,778.8	1,769.3	3.8	4.2	-134.16	139.9	65.3	215.5	208.5	6.94	31.052	
1,900.0	1,885.3	1,873.4	1,863.2	4.3	4.5	-136.89	149.4	72.2	245.8	238.3	7.46	32.949	
2,000.0	1,980.7	1,967.7	1,956.7	4.8	4.8	-139.40	158.9	79.0	277.3	269.3	8.00	34.677	
2,100.0	2,076.1	2,061.9	2,050.3	5.3	5.0	-141.40	168.3	85.7	309.2	300.6	8.53	36.259	
2,200.0	2,171.5	2,156.2	2,143.8	5.8	5.3	-143.03	177.8	92.5	341.3	332.3	9.05	37.708	
2,300.0	2,266.9	2,250.5	2,237.4	6.3	5.5	-144.38	187.2	99.3	373.7	364.1	9.57	39.037	
2,400.0	2,362.3	2,344.8	2,330.9	6.8	5.8	-145.52	196.7	106.1	406.3	396.2	10.09	40.257	
2,500.0	2,457.7	2,439.0	2,424.5	7.4	6.1	-146.49	206.1	112.9	438.9	428.3	10.61	41.381	
2,600.0	2,553.0	2,533.3	2,518.0	7.9	6.3	-147.32	215.6	119.7	471.7	460.5	11.12	42.417	
2,700.0	2,648.4	2,627.6	2,611.6	8.4	6.6	-148.05	225.0	126.5	504.5	492.9	11.63	43.376	
2,800.0	2,743.8	2,721.9	2,705.1	9.0	6.8	-148.69	234.5	133.3	537.4	525.2	12.14	44.265	
2,900.0	2,839.2	2,816.1	2,798.7	9.5	7.1	-149.25	243.9	140.1	570.3	557.7	12.65	45.091	
3,000.0	2,934.6	2,910.4	2,892.3	10.1	7.4	-149.75	253.4	146.9	603.3	590.2	13.16	45.861	
3,100.0	3,030.0	3,004.7	2,985.8	10.6	7.6	-150.20	262.8	153.7	636.3	622.7	13.66	46.579	
3,200.0	3,125.4	3,099.0	3,079.4	11.2	7.9	-150.61	272.3	160.5	669.4	655.2	14.17	47.251	
3,300.0	3,220.8	3,193.2	3,172.9	11.7	8.1	-150.98	281.7	167.3	702.5	687.8	14.67	47.880	
3,400.0	3,316.2	3,287.5	3,266.5	12.3	8.4	-151.31	291.2	174.1	735.6	720.4	15.18	48.471	
3,500.0	3,411.6	3,381.8	3,360.0	12.8	8.7	-151.62	300.6	180.9	768.7	753.1	15.68	49.027	
3,600.0	3,507.0	3,476.1	3,453.6	13.4	8.9	-151.90	310.0	187.6	801.9	785.7	16.18	49.551	
3,700.0	3,602.4	3,570.3	3,547.1	14.0	9.2	-152.16	319.5	194.4	835.1	818.4	16.69	50.045	
3,800.0	3,697.8	3,664.6	3,640.7	14.5	9.5	-152.40	328.9	201.2	868.2	851.0	17.19	50.512	
3,900.0	3,793.1	3,758.9	3,734.3	15.1	9.7	-152.62	338.4	208.0	901.4	883.7	17.69	50.955	
4,000.0	3,888.5	3,853.2	3,827.8	15.6	10.0	-152.83	347.8	214.8	934.6	916.4	18.19	51.374	
4,100.0	3,983.9	3,947.4	3,921.4	16.2	10.2	-153.02	357.3	221.6	967.8	949.1	18.69	51.772	
4,200.0	4,079.3	4,041.7	4,014.9	16.8	10.5	-153.20	366.7	228.4	1,001.1	981.9	19.20	52.150	
4,300.0	4,174.7	4,136.0	4,108.5	17.3	10.8	-153.36	376.2	235.2	1,034.3	1,014.6	19.70	52.510	
4,400.0	4,270.1	4,230.3	4,202.0	17.9	11.0	-153.52	385.6	242.0	1,067.5	1,047.3	20.20	52.853	
4,500.0	4,365.5	4,324.6	4,295.6	18.4	11.3	-153.67	395.1	248.8	1,100.8	1,080.1	20.70	53.180	
4,600.0	4,460.9	4,418.8	4,389.1	19.0	11.5	-153.81	404.5	255.6	1,134.0	1,112.8	21.20	53.493	
4,700.0	4,556.3	4,513.1	4,482.7	19.6	11.8	-153.94	414.0	262.4	1,167.3	1,145.6	21.70	53.791	
4,800.0	4,651.7	4,607.4	4,576.2	20.1	12.1	-154.06	423.4	269.2	1,200.5	1,178.3	22.20	54.077	
4,900.0	4,747.1	4,701.7	4,669.8	20.7	12.3	-154.18	432.9	276.0	1,233.8	1,211.1	22.70	54.350	
5,000.0	4,842.5	4,795.9	4,763.4	21.2	12.6	-154.29	442.3	282.8	1,267.1	1,243.9	23.20	54.612	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR04A D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,937.8	4,890.2	4,856.9	21.8	12.9	-154.40	451.8	289.6	1,300.3	1,276.6	23.70	54.864	
5,200.0	5,033.2	4,984.5	4,950.5	22.4	13.1	-154.50	461.2	296.3	1,333.6	1,309.4	24.20	55.105	
5,300.0	5,128.6	5,078.8	5,044.0	22.9	13.4	-154.59	470.7	303.1	1,366.9	1,342.2	24.70	55.337	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR04B D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-71.59	18.9	-56.9	60.0				
100.0	100.0	100.0	100.0	0.1	0.1	-71.59	18.9	-56.9	60.0	59.7	0.30	202.173	
200.0	200.0	200.0	200.0	0.3	0.3	-71.59	18.9	-56.9	60.0	59.3	0.65	92.890	
300.0	300.0	300.0	300.0	0.5	0.5	-71.59	18.9	-56.9	60.0	59.0	0.99	60.297	CC, ES
400.0	400.0	399.6	399.5	0.7	0.7	-69.98	20.7	-56.7	60.3	59.0	1.34	44.909	
500.0	500.0	498.9	498.7	0.8	0.9	-65.29	25.8	-56.1	61.7	60.0	1.69	36.423	
600.0	600.0	597.7	597.2	1.0	1.1	-58.06	34.3	-55.0	64.8	62.8	2.04	31.732	
700.0	700.0	695.8	694.6	1.2	1.3	-49.29	46.0	-53.5	70.8	68.4	2.39	29.651	
800.0	800.0	793.2	790.8	1.4	1.6	-40.25	60.9	-51.6	80.4	77.7	2.73	29.464	SF
900.0	900.0	891.8	888.0	1.5	1.9	-32.62	77.4	-49.5	92.6	89.6	3.08	30.041	
1,000.0	1,000.0	990.4	985.2	1.7	2.2	-26.83	93.8	-47.4	106.1	102.7	3.46	30.699	
1,100.0	1,100.0	1,088.8	1,082.2	1.9	2.6	-154.30	110.2	-45.4	122.0	118.1	3.95	30.862	
1,200.0	1,199.8	1,186.7	1,178.7	2.1	2.9	-151.66	126.5	-43.3	141.4	137.1	4.30	32.871	
1,300.0	1,299.5	1,284.1	1,274.7	2.3	3.2	-150.19	142.7	-41.2	163.9	159.3	4.66	35.214	
1,400.0	1,398.7	1,380.8	1,370.0	2.5	3.5	-149.53	158.8	-39.2	189.4	184.4	5.02	37.756	
1,500.0	1,497.5	1,476.7	1,464.5	2.7	3.9	-149.42	174.8	-37.2	217.8	212.4	5.39	40.420	
1,600.0	1,595.6	1,571.6	1,558.1	3.0	4.2	-149.66	190.6	-35.2	249.1	243.4	5.77	43.160	
1,700.0	1,693.1	1,665.5	1,650.7	3.4	4.5	-150.11	206.3	-33.2	283.3	277.1	6.16	45.952	
1,800.0	1,789.6	1,758.3	1,742.1	3.8	4.8	-150.69	221.7	-31.2	320.3	313.8	6.57	48.783	
1,900.0	1,885.3	1,849.8	1,832.4	4.3	5.1	-151.42	237.0	-29.3	360.2	353.2	6.99	51.548	
2,000.0	1,980.7	1,941.0	1,922.3	4.8	5.4	-152.33	252.2	-27.4	400.9	393.4	7.45	53.836	
2,100.0	2,076.1	2,032.2	2,012.2	5.3	5.7	-153.07	267.3	-25.5	441.6	433.7	7.91	55.861	
2,200.0	2,171.5	2,123.4	2,102.0	5.8	6.0	-153.68	282.5	-23.5	482.4	474.1	8.37	57.665	
2,300.0	2,266.9	2,214.5	2,191.9	6.3	6.3	-154.20	297.7	-21.6	523.3	514.5	8.83	59.282	
2,400.0	2,362.3	2,305.7	2,281.8	6.8	6.7	-154.64	312.9	-19.7	564.2	554.9	9.29	60.740	
2,500.0	2,457.7	2,396.9	2,371.7	7.4	7.0	-155.02	328.1	-17.8	605.1	595.3	9.75	62.061	
2,600.0	2,553.0	2,488.1	2,461.6	7.9	7.3	-155.36	343.3	-15.8	646.0	635.8	10.21	63.263	
2,700.0	2,648.4	2,579.3	2,551.5	8.4	7.6	-155.65	358.5	-13.9	686.9	676.2	10.67	64.363	
2,800.0	2,743.8	2,670.5	2,641.4	9.0	7.9	-155.91	373.7	-12.0	727.9	716.7	11.13	65.371	
2,900.0	2,839.2	2,761.7	2,731.3	9.5	8.2	-156.15	388.9	-10.1	768.8	757.2	11.60	66.300	
3,000.0	2,934.6	2,852.8	2,821.2	10.1	8.5	-156.36	404.1	-8.1	809.8	797.7	12.06	67.159	
3,100.0	3,030.0	2,944.0	2,911.1	10.6	8.8	-156.55	419.2	-6.2	850.8	838.2	12.52	67.954	
3,200.0	3,125.4	3,035.2	3,000.9	11.2	9.1	-156.72	434.4	-4.3	891.7	878.8	12.98	68.693	
3,300.0	3,220.8	3,126.4	3,090.8	11.7	9.4	-156.88	449.6	-2.4	932.7	919.3	13.44	69.381	
3,400.0	3,316.2	3,217.6	3,180.7	12.3	9.7	-157.02	464.8	-0.4	973.7	959.8	13.91	70.024	
3,500.0	3,411.6	3,308.8	3,270.6	12.8	10.1	-157.15	480.0	1.5	1,014.7	1,000.4	14.37	70.626	
3,600.0	3,507.0	3,399.9	3,360.5	13.4	10.4	-157.28	495.2	3.4	1,055.7	1,040.9	14.83	71.190	
3,700.0	3,602.4	3,491.1	3,450.4	14.0	10.7	-157.39	510.4	5.3	1,096.7	1,081.4	15.29	71.720	
3,800.0	3,697.8	3,582.3	3,540.3	14.5	11.0	-157.49	525.6	7.3	1,137.8	1,122.0	15.75	72.219	
3,900.0	3,793.1	3,673.5	3,630.2	15.1	11.3	-157.59	540.8	9.2	1,178.8	1,162.6	16.22	72.690	
4,000.0	3,888.5	3,764.7	3,720.1	15.6	11.6	-157.68	556.0	11.1	1,219.8	1,203.1	16.68	73.135	
4,100.0	3,983.9	3,855.9	3,809.9	16.2	11.9	-157.77	571.2	13.0	1,260.8	1,243.7	17.14	73.556	
4,200.0	4,079.3	3,947.1	3,899.8	16.8	12.2	-157.85	586.3	15.0	1,301.8	1,284.2	17.60	73.955	
4,300.0	4,174.7	4,038.2	3,989.7	17.3	12.5	-157.92	601.5	16.9	1,342.8	1,324.8	18.07	74.333	
4,400.0	4,270.1	4,129.4	4,079.6	17.9	12.9	-157.99	616.7	18.8	1,383.9	1,365.3	18.53	74.693	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR04C D21 595 (Existing) - DD - DD

Offset Site Error: 0.0 ft

Survey Program: 140-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-71.72	33.5	-101.4	106.9				
100.0	100.0	96.6	96.6	0.1	0.2	-71.91	33.1	-101.3	106.6	106.3	0.30	350.965	
200.0	200.0	197.1	197.0	0.3	0.3	-72.50	31.8	-100.9	105.8	105.2	0.65	163.359	
300.0	300.0	297.4	297.4	0.5	0.5	-73.45	29.8	-100.3	104.7	103.7	1.00	104.928	
400.0	400.0	397.5	397.4	0.7	0.7	-74.55	27.5	-99.4	103.2	101.8	1.35	76.602	
500.0	500.0	497.6	497.5	0.8	0.9	-75.51	25.5	-98.7	101.9	100.2	1.70	60.087	
600.0	600.0	597.9	597.8	1.0	1.1	-77.19	22.2	-97.7	100.2	98.2	2.05	48.962	
700.0	700.0	698.6	698.4	1.2	1.2	-79.63	17.7	-96.6	98.2	95.8	2.40	40.943	
800.0	800.0	799.8	799.4	1.4	1.4	-82.77	12.0	-94.4	95.2	92.5	2.75	34.610	
900.0	900.0	901.1	900.4	1.5	1.7	-86.52	5.5	-90.8	91.1	88.0	3.11	29.319	
1,000.0	1,000.0	1,002.3	1,001.3	1.7	1.9	-90.74	-1.1	-85.4	85.6	82.1	3.46	24.732	
1,100.0	1,100.0	1,103.1	1,101.6	1.9	2.1	133.73	-7.7	-78.5	80.2	76.3	3.97	20.227	
1,200.0	1,199.8	1,201.7	1,199.7	2.1	2.3	131.36	-14.1	-71.5	77.4	73.0	4.36	17.771	
1,207.8	1,207.6	1,209.3	1,207.3	2.1	2.3	131.28	-14.5	-71.1	77.4	73.0	4.39	17.644	CC, ES
1,300.0	1,299.5	1,300.5	1,298.2	2.3	2.5	131.43	-19.9	-66.7	79.1	74.3	4.74	16.691	
1,400.0	1,398.7	1,399.4	1,396.9	2.5	2.7	133.59	-25.3	-63.2	84.3	79.2	5.12	16.465	SF
1,500.0	1,497.5	1,498.7	1,496.0	2.7	3.0	136.28	-31.8	-60.2	92.8	87.2	5.53	16.786	
1,600.0	1,595.6	1,598.7	1,595.7	3.0	3.2	139.42	-39.0	-56.9	103.8	97.9	5.92	17.545	
1,700.0	1,693.1	1,697.7	1,694.4	3.4	3.4	144.02	-44.0	-52.9	117.3	111.0	6.27	18.699	
1,800.0	1,789.6	1,794.8	1,791.3	3.8	3.6	148.73	-48.0	-49.1	134.5	128.0	6.60	20.395	
1,900.0	1,885.3	1,889.4	1,885.8	4.3	3.7	152.91	-51.4	-46.4	156.7	149.8	6.91	22.684	
2,000.0	1,980.7	1,987.7	1,984.0	4.8	3.9	156.37	-55.1	-44.0	180.8	173.5	7.24	24.963	
2,100.0	2,076.1	2,085.6	2,081.8	5.3	4.1	158.93	-59.2	-40.9	204.3	196.8	7.58	26.963	
2,200.0	2,171.5	2,182.7	2,178.8	5.8	4.3	160.90	-63.6	-37.5	227.9	220.0	7.92	28.790	
2,300.0	2,266.9	2,279.0	2,275.0	6.3	4.5	162.57	-67.6	-34.1	251.8	243.5	8.25	30.518	
2,400.0	2,362.3	2,376.3	2,372.1	6.8	4.7	163.98	-71.5	-30.9	276.0	267.5	8.58	32.163	
2,500.0	2,457.7	2,471.8	2,467.4	7.4	4.9	165.19	-75.2	-27.5	300.3	291.4	8.91	33.690	
2,600.0	2,553.0	2,566.9	2,562.4	7.9	5.1	166.21	-78.5	-24.6	325.3	316.1	9.24	35.196	
2,700.0	2,648.4	2,663.4	2,658.9	8.4	5.3	167.18	-81.4	-21.8	350.7	341.2	9.57	36.646	
2,800.0	2,743.8	2,757.1	2,752.5	9.0	5.4	167.99	-84.1	-19.2	376.4	366.5	9.90	38.036	
2,900.0	2,839.2	2,853.4	2,848.8	9.5	5.6	168.78	-86.3	-16.7	402.6	392.4	10.22	39.395	
3,000.0	2,934.6	2,947.0	2,942.3	10.1	5.8	169.51	-88.0	-14.3	429.1	418.6	10.54	40.723	
3,100.0	3,030.0	3,043.2	3,038.5	10.6	5.9	170.15	-89.7	-12.3	456.1	445.2	10.86	41.981	
3,200.0	3,125.4	3,138.6	3,133.8	11.2	6.1	170.74	-91.2	-10.2	483.2	472.0	11.19	43.185	
3,300.0	3,220.8	3,233.1	3,228.3	11.7	6.3	171.20	-92.9	-8.6	510.5	499.0	11.52	44.327	
3,400.0	3,316.2	3,326.9	3,322.1	12.3	6.4	171.57	-94.8	-7.6	538.2	526.4	11.85	45.424	
3,500.0	3,411.6	3,423.7	3,418.9	12.8	6.6	171.89	-96.7	-6.7	566.2	554.0	12.19	46.461	
3,600.0	3,507.0	3,520.7	3,515.8	13.4	6.8	172.22	-98.6	-5.5	593.9	581.4	12.52	47.430	
3,700.0	3,602.4	3,614.9	3,610.0	14.0	6.9	172.46	-100.7	-4.6	621.7	608.9	12.86	48.338	
3,800.0	3,697.8	3,709.3	3,704.4	14.5	7.1	172.53	-104.2	-5.0	649.8	636.6	13.21	49.180	
3,900.0	3,793.1	3,802.9	3,797.9	15.1	7.3	172.58	-107.5	-5.6	678.2	664.6	13.56	49.999	
4,000.0	3,888.5	3,897.8	3,892.7	15.6	7.4	172.64	-110.6	-6.4	706.8	692.9	13.92	50.796	
4,100.0	3,983.9	3,992.1	3,986.9	16.2	7.6	172.72	-113.3	-7.0	735.6	721.3	14.26	51.575	
4,200.0	4,079.3	4,084.3	4,079.2	16.8	7.8	172.82	-115.5	-7.7	764.6	750.0	14.60	52.362	
4,300.0	4,174.7	4,180.4	4,175.2	17.3	7.9	172.93	-117.5	-8.6	794.0	779.1	14.95	53.118	
4,400.0	4,270.1	4,275.6	4,270.4	17.9	8.1	173.07	-119.2	-9.1	823.2	808.0	15.29	53.847	
4,500.0	4,365.5	4,369.5	4,364.3	18.4	8.2	173.21	-120.5	-9.5	852.7	837.0	15.62	54.571	
4,600.0	4,460.9	4,463.0	4,457.8	19.0	8.4	173.36	-121.5	-10.0	882.3	866.3	15.96	55.283	
4,700.0	4,556.3	4,555.7	4,550.5	19.6	8.5	173.50	-122.5	-10.7	912.1	895.8	16.29	55.986	
4,800.0	4,651.7	4,647.0	4,641.8	20.1	8.7	173.65	-122.8	-11.4	942.3	925.7	16.62	56.703	
4,900.0	4,747.1	4,741.3	4,736.1	20.7	8.8	173.82	-122.7	-12.1	972.8	955.9	16.95	57.402	
5,000.0	4,842.5	4,836.3	4,831.1	21.2	9.0	174.00	-122.4	-12.8	1,003.4	986.1	17.28	58.075	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR04C D21 595 (Existing) - DD - DD

Offset Site Error: 0.0 ft

Survey Program: 140-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,937.8	4,931.3	4,926.1	21.8	9.1	174.16	-122.2	-13.5	1,033.9	1,016.3	17.61	58.719	
5,200.0	5,033.2	5,025.0	5,019.8	22.4	9.3	174.30	-122.0	-14.3	1,064.6	1,046.6	17.94	59.349	
5,300.0	5,128.6	5,117.3	5,112.1	22.9	9.4	174.43	-121.7	-15.2	1,095.4	1,077.2	18.27	59.973	
5,400.0	5,224.0	5,210.9	5,205.7	23.5	9.6	174.56	-121.3	-16.3	1,126.5	1,107.9	18.59	60.581	
5,500.0	5,319.4	5,306.3	5,301.1	24.0	9.7	174.69	-120.8	-17.5	1,157.6	1,138.7	18.93	61.156	
5,600.0	5,414.8	5,403.0	5,397.8	24.6	9.9	174.78	-120.9	-19.0	1,188.6	1,169.3	19.27	61.680	
5,700.0	5,510.2	5,495.2	5,490.0	25.2	10.0	174.81	-121.7	-20.9	1,219.6	1,199.9	19.61	62.197	
5,800.0	5,605.6	5,594.6	5,589.2	25.7	10.2	174.85	-122.4	-23.1	1,250.8	1,230.9	19.96	62.671	
5,900.0	5,701.0	5,698.3	5,692.9	26.3	10.4	174.84	-124.6	-25.3	1,281.1	1,260.8	20.32	63.035	
6,000.0	5,796.4	5,789.7	5,784.3	26.9	10.5	174.83	-126.6	-27.3	1,311.4	1,290.8	20.67	63.454	
6,100.0	5,891.8	5,884.1	5,878.6	27.4	10.7	174.83	-128.1	-29.3	1,342.0	1,321.0	21.01	63.867	
6,200.0	5,987.2	5,983.5	5,978.0	28.0	10.9	174.85	-129.6	-31.1	1,372.4	1,351.1	21.37	64.236	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR04D D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	108.24	-4.7	14.4	15.1				
100.0	100.0	100.0	100.0	0.1	0.1	108.24	-4.7	14.4	15.1	14.8	0.30	50.994	
200.0	200.0	200.0	200.0	0.3	0.3	108.24	-4.7	14.4	15.1	14.5	0.65	23.430	CC, ES
300.0	300.0	299.5	299.5	0.5	0.5	102.70	-3.7	16.2	16.7	15.7	1.00	16.663	
400.0	400.0	398.9	398.6	0.7	0.7	91.42	-0.5	21.7	21.7	20.4	1.37	15.846	SF
500.0	500.0	498.6	498.1	0.8	0.9	83.66	3.1	28.0	28.3	26.5	1.75	16.184	
600.0	600.0	598.3	597.5	1.0	1.1	78.86	6.8	34.4	35.2	33.0	2.12	16.554	
700.0	700.0	698.1	697.0	1.2	1.3	75.65	10.4	40.8	42.2	39.7	2.50	16.882	
800.0	800.0	797.8	796.5	1.4	1.5	73.36	14.1	47.1	49.3	46.5	2.87	17.161	
900.0	900.0	897.5	895.9	1.5	1.8	71.65	17.7	53.5	56.5	53.3	3.25	17.395	
1,000.0	1,000.0	997.2	995.4	1.7	2.0	70.33	21.4	59.9	63.8	60.1	3.62	17.593	
1,100.0	1,100.0	1,097.0	1,094.9	1.9	2.2	-63.57	25.1	66.2	70.2	66.4	3.79	18.534	
1,200.0	1,199.8	1,196.7	1,194.3	2.1	2.4	-67.81	28.7	72.6	75.4	71.3	4.14	18.218	
1,300.0	1,299.5	1,296.2	1,293.6	2.3	2.6	-73.84	32.4	79.0	79.9	75.4	4.51	17.735	
1,400.0	1,398.7	1,395.5	1,392.6	2.5	2.8	-81.44	36.0	85.3	84.7	79.8	4.91	17.233	
1,500.0	1,497.5	1,494.4	1,491.2	2.7	3.0	-90.24	39.6	91.6	90.8	85.4	5.38	16.871	
1,600.0	1,595.6	1,592.7	1,589.2	3.0	3.3	-99.65	43.2	97.9	99.3	93.4	5.91	16.815	
1,700.0	1,693.1	1,690.4	1,686.7	3.4	3.5	-108.96	46.8	104.1	111.3	104.8	6.47	17.205	
1,800.0	1,789.6	1,787.3	1,783.3	3.8	3.7	-117.58	50.4	110.3	127.4	120.3	7.03	18.104	
1,900.0	1,885.3	1,883.4	1,879.1	4.3	3.9	-125.21	53.9	116.4	147.7	140.1	7.57	19.502	
2,000.0	1,980.7	1,979.2	1,974.7	4.8	4.1	-131.38	57.4	122.6	170.7	162.7	8.08	21.133	
2,100.0	2,076.1	2,075.1	2,070.3	5.3	4.3	-136.09	60.9	128.7	195.2	186.7	8.56	22.818	
2,200.0	2,171.5	2,170.9	2,165.9	5.8	4.5	-139.74	64.4	134.8	220.7	211.7	9.02	24.483	
2,300.0	2,266.9	2,266.7	2,261.4	6.3	4.7	-142.64	67.9	140.9	246.9	237.4	9.46	26.090	
2,400.0	2,362.3	2,362.6	2,357.0	6.8	4.9	-144.99	71.5	147.0	273.5	263.6	9.90	27.623	
2,500.0	2,457.7	2,458.4	2,452.6	7.4	5.1	-146.92	75.0	153.2	300.5	290.2	10.34	29.074	
2,600.0	2,553.0	2,554.2	2,548.1	7.9	5.3	-148.54	78.5	159.3	327.8	317.0	10.77	30.443	
2,700.0	2,648.4	2,650.1	2,643.7	8.4	5.5	-149.90	82.0	165.4	355.3	344.1	11.20	31.732	
2,800.0	2,743.8	2,745.9	2,739.3	9.0	5.8	-151.07	85.5	171.5	382.9	371.3	11.62	32.945	
2,900.0	2,839.2	2,841.7	2,834.9	9.5	6.0	-152.09	89.0	177.6	410.7	398.6	12.05	34.086	
3,000.0	2,934.6	2,937.5	2,930.4	10.1	6.2	-152.98	92.5	183.7	438.5	426.0	12.47	35.161	
3,100.0	3,030.0	3,033.4	3,026.0	10.6	6.4	-153.76	96.1	189.9	466.5	453.6	12.90	36.173	
3,200.0	3,125.4	3,129.2	3,121.6	11.2	6.6	-154.45	99.6	196.0	494.5	481.2	13.32	37.129	
3,300.0	3,220.8	3,225.0	3,217.1	11.7	6.8	-155.07	103.1	202.1	522.6	508.8	13.74	38.031	
3,400.0	3,316.2	3,320.9	3,312.7	12.3	7.0	-155.62	106.6	208.2	550.7	536.5	14.16	38.883	
3,500.0	3,411.6	3,416.7	3,408.3	12.8	7.2	-156.12	110.1	214.3	578.9	564.3	14.58	39.690	
3,600.0	3,507.0	3,512.5	3,503.8	13.4	7.4	-156.58	113.6	220.4	607.1	592.1	15.01	40.455	
3,700.0	3,602.4	3,608.4	3,599.4	14.0	7.6	-156.99	117.1	226.6	635.3	619.9	15.43	41.180	
3,800.0	3,697.8	3,704.2	3,695.0	14.5	7.8	-157.37	120.6	232.7	663.6	647.8	15.85	41.869	
3,900.0	3,793.1	3,800.0	3,790.6	15.1	8.0	-157.72	124.2	238.8	691.9	675.6	16.27	42.524	
4,000.0	3,888.5	3,895.9	3,886.1	15.6	8.2	-158.04	127.7	244.9	720.2	703.5	16.69	43.148	
4,100.0	3,983.9	3,991.7	3,981.7	16.2	8.5	-158.34	131.2	251.0	748.6	731.4	17.11	43.742	
4,200.0	4,079.3	4,087.5	4,077.3	16.8	8.7	-158.62	134.7	257.2	776.9	759.4	17.53	44.309	
4,300.0	4,174.7	4,183.4	4,172.8	17.3	8.9	-158.87	138.2	263.3	805.3	787.3	17.95	44.850	
4,400.0	4,270.1	4,279.2	4,268.4	17.9	9.1	-159.11	141.7	269.4	833.7	815.3	18.38	45.368	
4,500.0	4,365.5	4,375.0	4,364.0	18.4	9.3	-159.33	145.2	275.5	862.1	843.3	18.80	45.863	
4,600.0	4,460.9	4,470.8	4,459.6	19.0	9.5	-159.54	148.8	281.6	890.5	871.3	19.22	46.337	
4,700.0	4,556.3	4,566.7	4,555.1	19.6	9.7	-159.74	152.3	287.7	918.9	899.3	19.64	46.791	
4,800.0	4,651.7	4,662.5	4,650.7	20.1	9.9	-159.92	155.8	293.9	947.3	927.3	20.06	47.227	
4,900.0	4,747.1	4,758.3	4,746.3	20.7	10.1	-160.09	159.3	300.0	975.8	955.3	20.48	47.645	
5,000.0	4,842.5	4,854.2	4,841.8	21.2	10.3	-160.26	162.8	306.1	1,004.2	983.3	20.90	48.047	
5,100.0	4,937.8	4,950.0	4,937.4	21.8	10.5	-160.41	166.3	312.2	1,032.7	1,011.3	21.32	48.433	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR04D D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,033.2	5,045.8	5,033.0	22.4	10.7	-160.56	169.8	318.3	1,061.1	1,039.4	21.74	48.805	
5,300.0	5,128.6	5,141.7	5,128.6	22.9	10.9	-160.70	173.3	324.4	1,089.6	1,067.4	22.16	49.163	
5,400.0	5,224.0	5,237.5	5,224.1	23.5	11.2	-160.83	176.9	330.6	1,118.0	1,095.5	22.58	49.507	
5,500.0	5,319.4	5,333.3	5,319.7	24.0	11.4	-160.96	180.3	336.5	1,146.5	1,123.5	22.99	49.867	
5,600.0	5,414.8	5,428.7	5,415.0	24.6	11.5	-161.24	182.2	339.9	1,175.0	1,151.7	23.33	50.366	
5,700.0	5,510.2	5,523.9	5,510.2	25.2	11.6	-161.68	182.4	340.3	1,203.6	1,180.0	23.61	50.986	
5,800.0	5,605.6	5,619.1	5,605.4	25.7	11.8	-162.13	182.2	339.9	1,232.2	1,208.4	23.87	51.618	
5,900.0	5,701.0	5,714.5	5,700.8	26.3	11.9	-162.58	181.9	339.4	1,261.0	1,236.8	24.14	52.242	
6,000.0	5,796.4	5,809.8	5,796.1	26.9	12.0	-163.00	181.6	338.9	1,289.8	1,265.4	24.40	52.852	
6,100.0	5,891.8	5,905.1	5,891.4	27.4	12.2	-163.41	181.3	338.4	1,318.6	1,294.0	24.67	53.449	
6,200.0	5,987.2	6,000.5	5,986.7	28.0	12.3	-163.80	181.0	337.9	1,347.5	1,322.6	24.94	54.031	
6,300.0	6,082.5	6,095.8	6,082.1	28.5	12.5	-164.17	180.7	337.3	1,376.5	1,351.3	25.21	54.600	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05A D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-71.42	4.7	-14.1	14.9				
100.0	100.0	100.0	100.0	0.1	0.1	-71.42	4.7	-14.1	14.9	14.6	0.30	50.093	
200.0	200.0	200.0	200.0	0.3	0.3	-71.42	4.7	-14.1	14.9	14.2	0.65	23.016	
300.0	300.0	300.0	300.0	0.5	0.5	-71.42	4.7	-14.1	14.9	13.9	0.99	14.940	
400.0	400.0	400.3	400.3	0.7	0.7	-76.97	3.1	-13.4	13.8	12.4	1.34	10.254	
500.0	500.0	500.4	500.2	0.8	0.9	-98.70	-1.8	-11.5	11.6	9.9	1.70	6.825	
535.4	535.4	535.6	535.4	0.9	0.9	-112.09	-4.2	-10.4	11.3	9.4	1.83	6.150	CC, ES
600.0	600.0	600.0	599.5	1.0	1.1	-140.14	-9.8	-8.2	12.8	10.7	2.10	6.094	SF
700.0	700.0	699.2	698.1	1.2	1.3	-168.74	-20.1	-4.0	20.6	18.1	2.51	8.197	
800.0	800.0	798.6	796.8	1.4	1.6	179.58	-30.5	0.2	30.7	27.8	2.91	10.541	
900.0	900.0	897.9	895.5	1.5	1.8	173.80	-40.9	4.4	41.4	38.1	3.31	12.520	
1,000.0	1,000.0	997.3	994.2	1.7	2.1	170.41	-51.4	8.7	52.4	48.7	3.71	14.140	
1,100.0	1,100.0	1,096.8	1,093.1	1.9	2.3	37.34	-61.8	12.9	62.1	58.3	3.80	16.345	
1,200.0	1,199.8	1,196.6	1,192.2	2.1	2.6	38.07	-72.2	17.2	69.1	64.9	4.16	16.613	
1,300.0	1,299.5	1,296.4	1,291.4	2.3	2.8	40.39	-82.7	21.4	73.4	68.8	4.53	16.192	
1,400.0	1,398.7	1,396.3	1,390.6	2.5	3.1	44.26	-93.2	25.6	75.2	70.3	4.94	15.240	
1,500.0	1,497.5	1,496.0	1,489.7	2.7	3.4	49.92	-103.6	29.9	75.1	69.7	5.40	13.899	
1,600.0	1,595.6	1,595.5	1,588.5	3.0	3.6	57.76	-114.1	34.1	73.8	67.9	5.99	12.336	
1,700.0	1,693.1	1,694.5	1,687.0	3.4	3.9	68.16	-124.4	38.3	72.6	65.9	6.73	10.791	
1,730.4	1,722.5	1,724.6	1,716.8	3.5	3.9	71.85	-127.6	39.6	72.5	65.5	6.99	10.369	
1,800.0	1,789.6	1,793.1	1,784.9	3.8	4.1	81.09	-134.8	42.5	73.2	65.6	7.62	9.605	
1,900.0	1,885.3	1,891.1	1,882.3	4.3	4.4	95.49	-145.0	46.7	77.8	69.2	8.53	9.121	
2,000.0	1,980.7	1,989.0	1,979.5	4.8	4.6	108.28	-155.3	50.9	87.0	77.8	9.25	9.409	
2,100.0	2,076.1	2,086.8	2,076.7	5.3	4.9	118.29	-165.6	55.0	99.8	90.0	9.80	10.184	
2,200.0	2,171.5	2,184.6	2,173.9	5.8	5.2	125.90	-175.8	59.2	114.9	104.7	10.25	11.215	
2,300.0	2,266.9	2,282.4	2,271.1	6.3	5.4	131.70	-186.1	63.4	131.6	120.9	10.64	12.359	
2,400.0	2,362.3	2,380.3	2,368.3	6.8	5.7	136.17	-196.3	67.5	149.2	138.2	11.03	13.537	
2,500.0	2,457.7	2,478.1	2,465.5	7.4	5.9	139.69	-206.6	71.7	167.6	156.2	11.40	14.704	
2,600.0	2,553.0	2,575.9	2,562.7	7.9	6.2	142.51	-216.8	75.8	186.5	174.7	11.78	15.838	
2,700.0	2,648.4	2,673.7	2,659.9	8.4	6.4	144.82	-227.1	80.0	205.8	193.6	12.16	16.927	
2,800.0	2,743.8	2,771.6	2,757.1	9.0	6.7	146.72	-237.3	84.2	225.3	212.7	12.54	17.964	
2,900.0	2,839.2	2,869.4	2,854.3	9.5	7.0	148.33	-247.6	88.3	245.0	232.0	12.93	18.950	
3,000.0	2,934.6	2,967.2	2,951.5	10.1	7.2	149.69	-257.8	92.5	264.8	251.5	13.32	19.884	
3,100.0	3,030.0	3,065.0	3,048.7	10.6	7.5	150.87	-268.1	96.6	284.8	271.1	13.71	20.769	
3,200.0	3,125.4	3,162.9	3,145.9	11.2	7.7	151.89	-278.4	100.8	304.9	290.8	14.11	21.606	
3,300.0	3,220.8	3,260.7	3,243.1	11.7	8.0	152.78	-288.6	105.0	325.1	310.6	14.51	22.399	
3,400.0	3,316.2	3,358.5	3,340.3	12.3	8.2	153.57	-298.9	109.1	345.3	330.4	14.92	23.150	
3,500.0	3,411.6	3,456.3	3,437.5	12.8	8.5	154.27	-309.1	113.3	365.6	350.3	15.32	23.862	
3,600.0	3,507.0	3,554.2	3,534.7	13.4	8.8	154.90	-319.4	117.5	386.0	370.3	15.73	24.537	
3,700.0	3,602.4	3,652.0	3,631.9	14.0	9.0	155.47	-329.6	121.6	406.4	390.2	16.14	25.178	
3,800.0	3,697.8	3,749.8	3,729.1	14.5	9.3	155.98	-339.9	125.8	426.8	410.2	16.55	25.788	
3,900.0	3,793.1	3,847.6	3,826.3	15.1	9.5	156.44	-350.1	129.9	447.2	430.3	16.96	26.367	
4,000.0	3,888.5	3,945.5	3,923.5	15.6	9.8	156.87	-360.4	134.1	467.7	450.3	17.37	26.919	
4,100.0	3,983.9	4,043.3	4,020.7	16.2	10.0	157.26	-370.6	138.3	488.2	470.4	17.79	27.445	
4,200.0	4,079.3	4,141.1	4,117.9	16.8	10.3	157.62	-380.9	142.4	508.7	490.5	18.20	27.947	
4,300.0	4,174.7	4,238.9	4,215.0	17.3	10.6	157.95	-391.2	146.6	529.3	510.6	18.62	28.426	
4,400.0	4,270.1	4,336.8	4,312.2	17.9	10.8	158.25	-401.4	150.8	549.8	530.8	19.04	28.884	
4,500.0	4,365.5	4,434.6	4,409.4	18.4	11.1	158.53	-411.7	154.9	570.4	550.9	19.45	29.322	
4,600.0	4,460.9	4,532.4	4,506.6	19.0	11.3	158.80	-421.9	159.1	591.0	571.1	19.87	29.741	
4,700.0	4,556.3	4,630.2	4,603.8	19.6	11.6	159.04	-432.2	163.2	611.5	591.3	20.29	30.143	
4,800.0	4,651.7	4,728.1	4,701.0	20.1	11.8	159.27	-442.4	167.4	632.1	611.4	20.71	30.528	
4,900.0	4,747.1	4,825.9	4,798.2	20.7	12.1	159.49	-452.7	171.6	652.7	631.6	21.13	30.898	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05A D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,842.5	4,923.7	4,895.4	21.2	12.4	159.69	-462.9	175.7	673.4	651.8	21.54	31.254	
5,100.0	4,937.8	5,021.5	4,992.6	21.8	12.6	159.88	-473.2	179.9	694.0	672.0	21.96	31.595	
5,200.0	5,033.2	5,119.4	5,089.8	22.4	12.9	160.06	-483.4	184.0	714.6	692.2	22.38	31.924	
5,300.0	5,128.6	5,217.2	5,187.0	22.9	13.1	160.23	-493.7	188.2	735.2	712.4	22.81	32.240	
5,400.0	5,224.0	5,315.0	5,284.2	23.5	13.4	160.39	-503.9	192.4	755.9	732.7	23.23	32.545	
5,500.0	5,319.4	5,412.8	5,381.4	24.0	13.6	160.54	-514.2	196.5	776.5	752.9	23.65	32.839	
5,600.0	5,414.8	5,510.7	5,478.6	24.6	13.9	160.68	-524.5	200.7	797.2	773.1	24.07	33.122	
5,700.0	5,510.2	5,608.5	5,575.8	25.2	14.2	160.82	-534.7	204.9	817.8	793.4	24.49	33.396	
5,800.0	5,605.6	5,706.3	5,673.0	25.7	14.4	160.95	-545.0	209.0	838.5	813.6	24.91	33.660	
5,900.0	5,701.0	5,804.1	5,770.2	26.3	14.7	161.07	-555.2	213.2	859.2	833.8	25.33	33.915	
6,000.0	5,796.4	5,902.0	5,867.4	26.9	14.9	161.19	-565.5	217.3	879.8	854.1	25.76	34.162	
6,100.0	5,891.8	5,999.8	5,964.6	27.4	15.2	161.30	-575.7	221.5	900.5	874.3	26.18	34.401	
6,200.0	5,987.2	6,097.6	6,061.8	28.0	15.5	161.41	-586.0	225.7	921.2	894.6	26.60	34.632	
6,300.0	6,082.5	6,195.4	6,159.0	28.5	15.7	161.51	-596.2	229.8	941.9	914.8	27.02	34.855	
6,400.0	6,177.9	6,293.3	6,256.2	29.1	16.0	161.61	-606.5	234.0	962.5	935.1	27.44	35.072	
6,500.0	6,273.3	6,391.1	6,353.4	29.7	16.2	161.70	-616.7	238.1	983.2	955.4	27.87	35.282	
6,600.0	6,368.7	6,488.9	6,450.6	30.2	16.5	161.79	-627.0	242.3	1,003.9	975.6	28.29	35.486	
6,700.0	6,464.1	6,586.8	6,547.8	30.8	16.7	161.88	-637.3	246.5	1,024.6	995.9	28.71	35.684	
6,800.0	6,559.5	6,684.6	6,645.0	31.4	17.0	161.96	-647.5	250.6	1,045.3	1,016.2	29.14	35.875	
6,900.0	6,654.9	6,782.4	6,742.2	31.9	17.3	162.04	-657.8	254.8	1,066.0	1,036.4	29.56	36.062	
7,000.0	6,750.3	6,880.2	6,839.4	32.5	17.5	162.12	-668.0	259.0	1,086.7	1,056.7	29.98	36.243	
7,100.0	6,845.7	6,978.1	6,936.6	33.0	17.8	162.19	-678.3	263.1	1,107.4	1,077.0	30.41	36.419	
7,200.0	6,941.1	7,075.9	7,033.8	33.6	18.0	162.26	-688.5	267.3	1,128.1	1,097.2	30.83	36.590	
7,300.0	7,036.5	7,173.7	7,131.0	34.2	18.3	162.33	-698.8	271.4	1,148.8	1,117.5	31.25	36.756	
7,400.0	7,131.9	7,271.5	7,228.2	34.7	18.5	162.40	-709.0	275.6	1,169.5	1,137.8	31.68	36.918	
7,500.0	7,227.3	7,369.4	7,325.4	35.3	18.8	162.46	-719.3	279.8	1,190.2	1,158.1	32.10	37.075	
7,600.0	7,322.6	7,467.2	7,422.6	35.9	19.1	162.52	-729.5	283.9	1,210.9	1,178.4	32.53	37.229	
7,700.0	7,418.0	7,565.0	7,519.8	36.4	19.3	162.58	-739.8	288.1	1,231.6	1,198.6	32.95	37.378	
7,800.0	7,513.4	7,662.8	7,617.0	37.0	19.6	162.64	-750.1	292.3	1,252.3	1,218.9	33.37	37.524	
7,900.0	7,608.8	7,760.7	7,714.1	37.5	19.8	162.70	-760.3	296.4	1,273.0	1,239.2	33.80	37.666	
8,000.0	7,704.2	7,858.5	7,811.3	38.1	20.1	162.75	-770.6	300.6	1,293.7	1,259.5	34.22	37.804	
8,100.0	7,799.6	7,956.3	7,908.5	38.7	20.4	162.80	-780.8	304.7	1,314.4	1,279.8	34.65	37.939	
8,200.0	7,895.0	8,054.1	8,005.7	39.2	20.6	162.85	-791.1	308.9	1,335.1	1,300.1	35.07	38.071	
8,300.0	7,990.4	8,152.0	8,102.9	39.8	20.9	162.90	-801.3	313.1	1,355.8	1,320.3	35.49	38.199	
8,400.0	8,086.2	8,250.0	8,200.4	40.3	21.1	163.04	-811.6	317.2	1,375.3	1,339.3	35.96	38.249	
8,500.0	8,182.9	8,348.7	8,298.4	40.8	21.4	163.12	-821.9	321.4	1,391.4	1,355.0	36.42	38.203	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05B D21 595 (Existing) - DD - DD

Offset Site Error: 0.0 ft

Survey Program: 202-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-67.00	47.7	-112.4	122.2				
100.0	100.0	95.0	95.0	0.1	0.2	-66.99	47.9	-112.8	122.5	122.2	0.31	400.081	
200.0	200.0	194.0	194.0	0.3	0.3	-66.94	48.5	-113.9	123.8	123.1	0.65	191.802	
300.0	300.0	293.6	293.6	0.5	0.5	-66.87	49.3	-115.5	125.6	124.6	0.99	126.273	
400.0	400.0	392.9	392.8	0.7	0.7	-67.10	49.7	-117.7	127.8	126.5	1.35	94.911	
500.0	500.0	494.1	494.0	0.8	0.9	-67.87	49.0	-120.4	130.0	128.3	1.70	76.328	
600.0	600.0	597.5	597.3	1.0	1.0	-69.25	46.1	-121.8	130.3	128.2	2.06	63.204	
700.0	700.0	699.6	699.3	1.2	1.2	-71.72	40.3	-121.9	128.5	126.0	2.42	53.107	
800.0	800.0	801.5	800.9	1.4	1.4	-75.15	32.1	-120.9	125.2	122.4	2.78	45.066	
900.0	900.0	902.8	901.7	1.5	1.6	-79.12	22.8	-118.5	120.8	117.7	3.14	38.535	
1,000.0	1,000.0	1,003.7	1,002.1	1.7	1.9	-83.35	13.4	-114.8	115.8	112.3	3.49	33.152	
1,100.0	1,100.0	1,105.0	1,102.8	1.9	2.1	141.32	4.6	-109.9	111.6	107.6	3.97	28.134	
1,200.0	1,199.8	1,205.9	1,203.1	2.1	2.3	138.20	-5.0	-103.5	108.9	104.5	4.38	24.894	
1,256.1	1,255.8	1,262.1	1,258.9	2.2	2.5	136.77	-10.7	-99.7	108.5	103.9	4.61	23.518	CC, ES
1,300.0	1,299.5	1,305.6	1,302.1	2.3	2.6	135.70	-15.5	-96.8	108.8	104.0	4.81	22.642	
1,400.0	1,398.7	1,403.4	1,399.1	2.5	2.8	134.11	-26.6	-91.2	112.4	107.1	5.24	21.442	
1,500.0	1,497.5	1,503.4	1,498.5	2.7	3.1	134.51	-36.5	-86.6	119.4	113.7	5.68	21.008	
1,600.0	1,595.6	1,602.6	1,597.1	3.0	3.3	136.09	-46.0	-81.9	128.8	122.7	6.13	21.004	SF
1,700.0	1,693.1	1,701.6	1,695.6	3.4	3.5	138.49	-55.1	-77.4	141.1	134.6	6.58	21.454	
1,800.0	1,789.6	1,799.7	1,793.2	3.8	3.8	141.48	-63.5	-73.1	156.5	149.5	7.01	22.336	
1,900.0	1,885.3	1,896.8	1,889.7	4.3	4.0	144.20	-72.8	-69.4	175.4	167.9	7.45	23.530	
2,000.0	1,980.7	1,995.1	1,987.5	4.8	4.3	146.41	-83.3	-65.7	195.3	187.4	7.92	24.672	
2,100.0	2,076.1	2,093.5	2,085.0	5.3	4.5	147.80	-95.3	-61.9	215.0	206.6	8.41	25.556	
2,200.0	2,171.5	2,187.7	2,178.4	5.8	4.8	148.60	-107.8	-59.3	235.7	226.8	8.92	26.422	
2,300.0	2,266.9	2,286.9	2,276.6	6.3	5.1	149.22	-121.4	-56.9	256.8	247.3	9.45	27.169	
2,400.0	2,362.3	2,386.2	2,375.0	6.8	5.4	149.82	-134.6	-54.4	277.7	267.8	9.97	27.858	
2,500.0	2,457.7	2,495.6	2,483.2	7.4	5.7	150.60	-148.9	-48.0	295.5	285.1	10.49	28.177	
2,600.0	2,553.0	2,594.1	2,580.7	7.9	6.0	151.31	-161.6	-40.8	312.1	301.1	10.97	28.439	
2,700.0	2,648.4	2,690.7	2,676.2	8.4	6.3	152.02	-173.5	-33.7	328.9	317.4	11.44	28.754	
2,800.0	2,743.8	2,784.3	2,769.1	9.0	6.5	152.72	-184.4	-27.8	346.8	334.9	11.89	29.167	
2,900.0	2,839.2	2,874.6	2,858.6	9.5	6.8	153.15	-195.6	-23.7	366.3	353.9	12.36	29.626	
3,000.0	2,934.6	2,978.1	2,960.9	10.1	7.1	153.38	-209.7	-19.7	386.0	373.1	12.89	29.935	
3,100.0	3,030.0	3,013.0	2,995.6	10.6	7.2	153.52	-214.1	-18.2	410.4	397.1	13.25	30.971	
3,200.0	3,125.4	3,013.0	2,995.6	11.2	7.2	153.52	-214.1	-18.2	454.4	440.9	13.54	33.571	
3,300.0	3,220.8	3,013.0	2,995.6	11.7	7.2	153.52	-214.1	-18.2	514.4	500.6	13.82	37.212	
3,400.0	3,316.2	3,013.0	2,995.6	12.3	7.2	153.52	-214.1	-18.2	585.4	571.3	14.11	41.485	
3,500.0	3,411.6	3,013.0	2,995.6	12.8	7.2	153.52	-214.1	-18.2	663.9	649.5	14.40	46.108	
3,600.0	3,507.0	3,013.0	2,995.6	13.4	7.2	153.52	-214.1	-18.2	747.6	732.9	14.69	50.896	
3,700.0	3,602.4	3,013.0	2,995.6	14.0	7.2	153.52	-214.1	-18.2	834.8	819.9	14.98	55.739	
3,800.0	3,697.8	3,013.0	2,995.6	14.5	7.2	153.52	-214.1	-18.2	924.7	909.4	15.27	60.565	
3,900.0	3,793.1	3,013.0	2,995.6	15.1	7.2	153.52	-214.1	-18.2	1,016.4	1,000.9	15.56	65.330	
4,000.0	3,888.5	3,013.0	2,995.6	15.6	7.2	153.52	-214.1	-18.2	1,109.6	1,093.8	15.85	70.010	
4,100.0	3,983.9	3,013.0	2,995.6	16.2	7.2	153.52	-214.1	-18.2	1,203.9	1,187.7	16.14	74.586	
4,200.0	4,079.3	3,013.0	2,995.6	16.8	7.2	153.52	-214.1	-18.2	1,299.0	1,282.6	16.43	79.051	
4,300.0	4,174.7	3,013.0	2,995.6	17.3	7.2	153.52	-214.1	-18.2	1,394.8	1,378.1	16.72	83.400	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05BDR D21-595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-71.59	28.4	-85.4	90.0				
100.0	100.0	100.0	100.0	0.1	0.2	-71.59	28.4	-85.4	90.0	89.7	0.32	278.671	
200.0	200.0	200.0	200.0	0.3	0.3	-71.59	28.4	-85.4	90.0	89.3	0.67	133.907	
300.0	300.0	301.6	301.6	0.5	0.5	-72.59	26.7	-85.0	89.1	88.1	1.02	87.003	
400.0	400.0	402.9	402.7	0.7	0.7	-75.69	21.4	-83.9	86.6	85.2	1.38	62.881	
500.0	500.0	503.7	503.2	0.8	1.0	-81.20	12.7	-82.0	83.0	81.3	1.74	47.832	
600.0	600.0	603.2	602.1	1.0	1.2	-88.52	2.1	-79.7	79.7	77.6	2.11	37.850	
700.0	700.0	702.6	700.9	1.2	1.4	-96.33	-8.6	-77.4	77.9	75.4	2.50	31.161	
773.2	773.2	775.4	773.2	1.3	1.6	-102.21	-16.4	-75.7	77.4	74.6	2.80	27.648	CC
800.0	800.0	802.0	799.7	1.4	1.7	-104.36	-19.2	-75.1	77.5	74.6	2.91	26.589	ES
900.0	900.0	901.4	898.5	1.5	1.9	-112.31	-29.9	-72.8	78.7	75.3	3.35	23.471	
1,000.0	1,000.0	1,000.8	997.3	1.7	2.2	-119.89	-40.5	-70.5	81.3	77.5	3.80	21.380	
1,100.0	1,100.0	1,100.4	1,096.2	1.9	2.4	102.46	-51.2	-68.2	85.7	81.4	4.26	20.099	
1,200.0	1,199.8	1,200.1	1,195.3	2.1	2.7	99.25	-61.8	-65.9	91.3	86.7	4.66	19.586	
1,300.0	1,299.5	1,299.9	1,294.5	2.3	3.0	98.43	-72.5	-63.5	97.7	92.6	5.09	19.184	
1,400.0	1,398.7	1,399.6	1,393.7	2.5	3.2	99.58	-83.2	-61.2	104.6	99.0	5.56	18.803	
1,500.0	1,497.5	1,499.2	1,492.6	2.7	3.5	102.31	-93.8	-58.9	112.2	106.1	6.08	18.459	
1,600.0	1,595.6	1,598.4	1,591.3	3.0	3.7	106.24	-104.5	-56.6	121.0	114.4	6.64	18.221	
1,700.0	1,693.1	1,697.3	1,689.5	3.4	4.0	110.98	-115.1	-54.3	131.6	124.4	7.24	18.179	SF
1,800.0	1,789.6	1,795.6	1,787.2	3.8	4.2	116.16	-125.6	-52.1	144.5	136.7	7.85	18.412	
1,900.0	1,885.3	1,893.2	1,884.3	4.3	4.5	121.48	-136.0	-49.8	160.2	151.8	8.45	18.971	
2,000.0	1,980.7	1,990.7	1,981.2	4.8	4.7	126.23	-146.5	-47.5	177.7	168.7	9.01	19.716	
2,100.0	2,076.1	2,088.2	2,078.1	5.3	5.0	130.13	-156.9	-45.3	196.1	186.6	9.55	20.534	
2,200.0	2,171.5	2,185.6	2,175.0	5.8	5.2	133.36	-167.3	-43.0	215.3	205.3	10.07	21.381	
2,300.0	2,266.9	2,283.1	2,271.8	6.3	5.5	136.05	-177.8	-40.8	235.1	224.5	10.58	22.228	
2,400.0	2,362.3	2,380.6	2,368.7	6.8	5.7	138.33	-188.2	-38.5	255.2	244.2	11.07	23.060	
2,500.0	2,457.7	2,478.1	2,465.6	7.4	6.0	140.28	-198.6	-36.3	275.7	264.2	11.55	23.867	
2,600.0	2,553.0	2,575.5	2,562.5	7.9	6.2	141.95	-209.1	-34.0	296.5	284.5	12.03	24.644	
2,700.0	2,648.4	2,673.0	2,659.4	8.4	6.5	143.41	-219.5	-31.7	317.5	305.0	12.51	25.388	
2,800.0	2,743.8	2,770.5	2,756.3	9.0	6.7	144.69	-229.9	-29.5	338.7	325.7	12.98	26.097	
2,900.0	2,839.2	2,868.0	2,853.2	9.5	7.0	145.82	-240.4	-27.2	360.0	346.5	13.44	26.774	
3,000.0	2,934.6	2,965.4	2,950.1	10.1	7.3	146.82	-250.8	-25.0	381.4	367.5	13.91	27.417	
3,100.0	3,030.0	3,062.9	3,046.9	10.6	7.5	147.71	-261.2	-22.7	402.9	388.5	14.37	28.030	
3,200.0	3,125.4	3,160.4	3,143.8	11.2	7.8	148.52	-271.7	-20.5	424.5	409.7	14.84	28.612	
3,300.0	3,220.8	3,257.9	3,240.7	11.7	8.0	149.24	-282.1	-18.2	446.2	430.9	15.30	29.166	
3,400.0	3,316.2	3,355.3	3,337.6	12.3	8.3	149.90	-292.5	-15.9	467.9	452.1	15.76	29.693	
3,500.0	3,411.6	3,452.8	3,434.5	12.8	8.5	150.50	-303.0	-13.7	489.7	473.5	16.22	30.195	
3,600.0	3,507.0	3,550.3	3,531.4	13.4	8.8	151.05	-313.4	-11.4	511.5	494.9	16.68	30.673	
3,700.0	3,602.4	3,647.7	3,628.3	14.0	9.0	151.56	-323.8	-9.2	533.4	516.3	17.14	31.129	
3,800.0	3,697.8	3,745.2	3,725.2	14.5	9.3	152.02	-334.3	-6.9	555.3	537.7	17.59	31.564	
3,900.0	3,793.1	3,842.7	3,822.0	15.1	9.5	152.45	-344.7	-4.7	577.3	559.2	18.05	31.980	
4,000.0	3,888.5	3,940.2	3,918.9	15.6	9.8	152.85	-355.2	-2.4	599.2	580.7	18.51	32.376	
4,100.0	3,983.9	4,037.6	4,015.8	16.2	10.0	153.22	-365.6	-0.1	621.2	602.3	18.97	32.756	
4,200.0	4,079.3	4,135.1	4,112.7	16.8	10.3	153.57	-376.0	2.1	643.3	623.8	19.42	33.119	
4,300.0	4,174.7	4,232.6	4,209.6	17.3	10.5	153.89	-386.5	4.4	665.3	645.4	19.88	33.467	
4,400.0	4,270.1	4,330.1	4,306.5	17.9	10.8	154.19	-396.9	6.6	687.4	667.0	20.34	33.801	
4,500.0	4,365.5	4,427.5	4,403.4	18.4	11.0	154.47	-407.3	8.9	709.5	688.7	20.79	34.120	
4,600.0	4,460.9	4,525.0	4,500.3	19.0	11.3	154.74	-417.8	11.1	731.6	710.3	21.25	34.428	
4,700.0	4,556.3	4,622.5	4,597.1	19.6	11.5	154.99	-428.2	13.4	753.7	732.0	21.71	34.723	
4,800.0	4,651.7	4,720.0	4,694.0	20.1	11.8	155.22	-438.6	15.7	775.8	753.6	22.16	35.006	
4,900.0	4,747.1	4,817.4	4,790.9	20.7	12.0	155.45	-449.1	17.9	797.9	775.3	22.62	35.279	
5,000.0	4,842.5	4,914.9	4,887.8	21.2	12.3	155.66	-459.5	20.2	820.1	797.0	23.07	35.541	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05BDR D21-595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,937.8	5,012.4	4,984.7	21.8	12.5	155.86	-469.9	22.4	842.2	818.7	23.53	35.794	
5,200.0	5,033.2	5,109.9	5,081.6	22.4	12.8	156.05	-480.4	24.7	864.4	840.4	23.99	36.038	
5,300.0	5,128.6	5,200.0	5,171.2	22.9	13.0	156.24	-489.6	26.7	886.8	862.4	24.41	36.326	
5,400.0	5,224.0	5,283.0	5,254.0	23.5	13.2	156.53	-495.9	28.1	910.6	885.8	24.76	36.779	
5,500.0	5,319.4	5,365.6	5,336.5	24.0	13.3	156.94	-499.9	28.9	935.9	910.8	25.04	37.370	
5,600.0	5,414.8	5,447.2	5,418.0	24.6	13.4	157.44	-501.5	29.3	962.7	937.4	25.28	38.084	
5,700.0	5,510.2	5,537.4	5,508.2	25.2	13.5	158.06	-501.6	29.2	990.6	965.2	25.48	38.882	
5,800.0	5,605.6	5,630.8	5,601.6	25.7	13.7	158.65	-501.9	28.8	1,019.0	993.3	25.69	39.667	
5,900.0	5,701.0	5,726.1	5,696.9	26.3	13.8	159.22	-502.2	28.2	1,047.6	1,021.7	25.90	40.438	
6,000.0	5,796.4	5,821.4	5,792.3	26.9	13.9	159.76	-502.5	27.7	1,076.2	1,050.1	26.13	41.192	
6,100.0	5,891.8	5,916.7	5,887.6	27.4	14.0	160.27	-502.8	27.2	1,104.9	1,078.6	26.35	41.929	
6,200.0	5,987.2	6,012.1	5,982.9	28.0	14.2	160.75	-503.1	26.7	1,133.7	1,107.1	26.58	42.650	
6,300.0	6,082.5	6,107.4	6,078.2	28.5	14.3	161.22	-503.4	26.2	1,162.6	1,135.7	26.82	43.353	
6,400.0	6,177.9	6,202.7	6,173.6	29.1	14.4	161.65	-503.7	25.7	1,191.5	1,164.4	27.05	44.041	
6,500.0	6,273.3	6,298.1	6,268.9	29.7	14.5	162.07	-504.0	25.1	1,220.5	1,193.2	27.30	44.712	
6,600.0	6,368.7	6,393.4	6,364.2	30.2	14.7	162.47	-504.3	24.6	1,249.5	1,222.0	27.54	45.367	
6,700.0	6,464.1	6,488.7	6,459.6	30.8	14.8	162.85	-504.6	24.1	1,278.6	1,250.8	27.79	46.008	
6,800.0	6,559.5	6,584.1	6,554.9	31.4	14.9	163.22	-504.9	23.6	1,307.8	1,279.7	28.04	46.633	
6,900.0	6,654.9	6,679.4	6,650.2	31.9	15.0	163.56	-505.2	23.1	1,337.0	1,308.7	28.30	47.243	
7,000.0	6,750.3	6,774.7	6,745.5	32.5	15.2	163.90	-505.5	22.6	1,366.2	1,337.7	28.56	47.839	
7,100.0	6,845.7	6,870.1	6,840.9	33.0	15.3	164.22	-505.8	22.0	1,395.5	1,366.7	28.82	48.420	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05C D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-71.54	14.2	-42.5	44.9				
100.0	100.0	100.0	100.0	0.1	0.1	-71.54	14.2	-42.5	44.9	44.6	0.30	151.180	
200.0	200.0	200.0	200.0	0.3	0.3	-71.54	14.2	-42.5	44.9	44.2	0.65	69.461	
300.0	300.0	300.9	300.9	0.5	0.5	-73.39	12.5	-42.0	43.8	42.8	1.00	43.970	
400.0	400.0	401.6	401.4	0.7	0.7	-79.47	7.5	-40.3	41.0	39.6	1.35	30.414	
500.0	500.0	501.7	501.2	0.8	0.9	-91.28	-0.8	-37.5	37.5	35.8	1.71	21.936	
592.8	592.8	594.0	592.8	1.0	1.2	-108.63	-11.4	-33.9	35.8	33.7	2.09	17.087	CC
600.0	600.0	601.2	599.9	1.0	1.2	-110.21	-12.4	-33.6	35.8	33.7	2.13	16.830	ES
700.0	700.0	699.9	697.5	1.2	1.5	-132.78	-26.6	-28.8	39.3	36.7	2.64	14.902	
800.0	800.0	798.7	795.0	1.4	1.8	-150.02	-41.3	-23.8	47.9	44.8	3.15	15.205	
900.0	900.0	897.4	892.5	1.5	2.1	-161.36	-56.0	-18.9	59.5	55.9	3.64	16.364	
1,000.0	1,000.0	996.2	990.1	1.7	2.4	-168.84	-70.6	-13.9	72.7	68.6	4.10	17.719	
1,100.0	1,100.0	1,095.2	1,087.8	1.9	2.7	55.04	-85.4	-9.0	85.7	81.7	3.96	21.645	
1,200.0	1,199.8	1,194.5	1,185.9	2.1	3.0	53.41	-100.1	-4.0	96.9	92.6	4.32	22.428	
1,300.0	1,299.5	1,294.1	1,284.3	2.3	3.4	53.61	-114.9	1.0	106.1	101.4	4.72	22.492	
1,400.0	1,398.7	1,393.8	1,382.7	2.5	3.7	55.22	-129.7	6.0	113.3	108.1	5.16	21.951	
1,500.0	1,497.5	1,493.5	1,481.2	2.7	4.0	58.06	-144.5	11.0	118.7	113.0	5.67	20.925	
1,600.0	1,595.6	1,593.0	1,579.5	3.0	4.3	62.06	-159.3	16.0	122.7	116.4	6.28	19.544	
1,700.0	1,693.1	1,692.3	1,677.6	3.4	4.6	67.23	-174.1	20.9	125.9	118.9	7.01	17.967	
1,800.0	1,789.6	1,791.2	1,775.2	3.8	5.0	73.53	-188.7	25.9	129.1	121.2	7.88	16.388	
1,900.0	1,885.3	1,889.7	1,872.5	4.3	5.3	80.82	-203.4	30.8	133.2	124.3	8.86	15.032	
2,000.0	1,980.7	1,988.0	1,969.6	4.8	5.6	87.99	-218.0	35.7	139.4	129.6	9.86	14.140	
2,100.0	2,076.1	2,086.3	2,066.6	5.3	5.9	94.48	-232.6	40.7	147.7	136.8	10.82	13.650	
2,200.0	2,171.5	2,184.6	2,163.7	5.8	6.2	100.23	-247.2	45.6	157.6	145.9	11.72	13.453	SF
2,300.0	2,266.9	2,282.9	2,260.8	6.3	6.5	105.28	-261.8	50.5	169.0	156.4	12.55	13.460	
2,400.0	2,362.3	2,381.2	2,357.9	6.8	6.9	109.66	-276.4	55.4	181.5	168.2	13.34	13.609	
2,500.0	2,457.7	2,479.5	2,455.0	7.4	7.2	113.48	-291.0	60.4	194.9	180.9	14.07	13.853	
2,600.0	2,553.0	2,577.8	2,552.1	7.9	7.5	116.79	-305.6	65.3	209.1	194.4	14.77	14.160	
2,700.0	2,648.4	2,676.1	2,649.2	8.4	7.8	119.68	-320.2	70.2	223.9	208.5	15.44	14.507	
2,800.0	2,743.8	2,774.4	2,746.2	9.0	8.1	122.21	-334.8	75.1	239.2	223.2	16.08	14.877	
2,900.0	2,839.2	2,872.7	2,843.3	9.5	8.5	124.44	-349.4	80.1	254.9	238.2	16.71	15.260	
3,000.0	2,934.6	2,971.0	2,940.4	10.1	8.8	126.40	-364.0	85.0	271.0	253.7	17.32	15.648	
3,100.0	3,030.0	3,069.3	3,037.5	10.6	9.1	128.15	-378.6	89.9	287.3	269.4	17.92	16.034	
3,200.0	3,125.4	3,167.6	3,134.6	11.2	9.4	129.71	-393.2	94.8	303.8	285.3	18.51	16.416	
3,300.0	3,220.8	3,265.9	3,231.7	11.7	9.7	131.11	-407.8	99.8	320.6	301.5	19.09	16.791	
3,400.0	3,316.2	3,364.2	3,328.7	12.3	10.1	132.37	-422.4	104.7	337.5	317.8	19.67	17.156	
3,500.0	3,411.6	3,462.5	3,425.8	12.8	10.4	133.51	-437.0	109.6	354.5	334.3	20.25	17.511	
3,600.0	3,507.0	3,560.8	3,522.9	13.4	10.7	134.54	-451.6	114.5	371.7	350.9	20.82	17.856	
3,700.0	3,602.4	3,659.1	3,620.0	14.0	11.0	135.49	-466.2	119.4	389.0	367.6	21.39	18.189	
3,800.0	3,697.8	3,757.4	3,717.1	14.5	11.3	136.35	-480.8	124.4	406.4	384.4	21.95	18.512	
3,900.0	3,793.1	3,855.7	3,814.2	15.1	11.6	137.14	-495.4	129.3	423.9	401.3	22.52	18.823	
4,000.0	3,888.5	3,954.0	3,911.3	15.6	12.0	137.87	-510.0	134.2	441.4	418.3	23.08	19.123	
4,100.0	3,983.9	4,052.3	4,008.3	16.2	12.3	138.55	-524.6	139.1	459.0	435.4	23.64	19.412	
4,200.0	4,079.3	4,150.6	4,105.4	16.8	12.6	139.17	-539.2	144.1	476.7	452.5	24.21	19.692	
4,300.0	4,174.7	4,248.9	4,202.5	17.3	12.9	139.75	-553.8	149.0	494.4	469.6	24.77	19.961	
4,400.0	4,270.1	4,347.2	4,299.6	17.9	13.2	140.29	-568.5	153.9	512.1	486.8	25.33	20.220	
4,500.0	4,365.5	4,445.5	4,396.7	18.4	13.6	140.79	-583.1	158.8	529.9	504.0	25.89	20.471	
4,600.0	4,460.9	4,543.8	4,493.8	19.0	13.9	141.26	-597.7	163.8	547.8	521.3	26.45	20.712	
4,700.0	4,556.3	4,642.1	4,590.8	19.6	14.2	141.71	-612.3	168.7	565.6	538.6	27.01	20.945	
4,800.0	4,651.7	4,740.4	4,687.9	20.1	14.5	142.12	-626.9	173.6	583.5	556.0	27.56	21.170	
4,900.0	4,747.1	4,838.7	4,785.0	20.7	14.8	142.51	-641.5	178.5	601.5	573.3	28.12	21.386	
5,000.0	4,842.5	4,937.0	4,882.1	21.2	15.2	142.88	-656.1	183.5	619.4	590.7	28.68	21.596	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05C D21 595 - DD - Plan #2

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,937.8	5,035.3	4,979.2	21.8	15.5	143.22	-670.7	188.4	637.4	608.1	29.24	21.798	
5,200.0	5,033.2	5,133.6	5,076.3	22.4	15.8	143.55	-685.3	193.3	655.4	625.6	29.80	21.994	
5,300.0	5,128.6	5,231.9	5,173.4	22.9	16.1	143.86	-699.9	198.2	673.4	643.0	30.36	22.183	
5,400.0	5,224.0	5,330.2	5,270.4	23.5	16.4	144.15	-714.5	203.2	691.4	660.5	30.91	22.366	
5,500.0	5,319.4	5,428.5	5,367.5	24.0	16.8	144.43	-729.1	208.1	709.5	678.0	31.47	22.543	
5,600.0	5,414.8	5,526.8	5,464.6	24.6	17.1	144.70	-743.7	213.0	727.5	695.5	32.03	22.714	
5,700.0	5,510.2	5,625.1	5,561.7	25.2	17.4	144.95	-758.3	217.9	745.6	713.0	32.59	22.880	
5,800.0	5,605.6	5,723.4	5,658.8	25.7	17.7	145.19	-772.9	222.9	763.7	730.6	33.15	23.040	
5,900.0	5,701.0	5,821.7	5,755.9	26.3	18.0	145.42	-787.5	227.8	781.8	748.1	33.70	23.196	
6,000.0	5,796.4	5,920.0	5,852.9	26.9	18.4	145.64	-802.1	232.7	799.9	765.7	34.26	23.347	
6,100.0	5,891.8	6,018.3	5,950.0	27.4	18.7	145.85	-816.7	237.6	818.1	783.2	34.82	23.494	
6,200.0	5,987.2	6,116.6	6,047.1	28.0	19.0	146.05	-831.3	242.5	836.2	800.8	35.38	23.636	
6,300.0	6,082.5	6,214.9	6,144.2	28.5	19.3	146.24	-845.9	247.5	854.4	818.4	35.94	23.774	
6,400.0	6,177.9	6,313.2	6,241.3	29.1	19.6	146.42	-860.5	252.4	872.5	836.0	36.50	23.907	
6,500.0	6,273.3	6,411.5	6,338.4	29.7	19.9	146.60	-875.1	257.3	890.7	853.6	37.05	24.037	
6,600.0	6,368.7	6,509.8	6,435.5	30.2	20.3	146.77	-889.7	262.2	908.8	871.2	37.61	24.164	
6,700.0	6,464.1	6,608.1	6,532.5	30.8	20.6	146.93	-904.3	267.2	927.0	888.9	38.17	24.287	
6,800.0	6,559.5	6,706.4	6,629.6	31.4	20.9	147.09	-918.9	272.1	945.2	906.5	38.73	24.406	
6,900.0	6,654.9	6,804.7	6,726.7	31.9	21.2	147.24	-933.5	277.0	963.4	924.1	39.29	24.522	
7,000.0	6,750.3	6,903.0	6,823.8	32.5	21.5	147.38	-948.1	281.9	981.6	941.8	39.85	24.636	
7,100.0	6,845.7	7,001.3	6,920.9	33.0	21.9	147.52	-962.7	286.9	999.8	959.4	40.40	24.746	
7,200.0	6,941.1	7,099.6	7,018.0	33.6	22.2	147.66	-977.3	291.8	1,018.0	977.1	40.96	24.853	
7,300.0	7,036.5	7,197.9	7,115.0	34.2	22.5	147.79	-991.9	296.7	1,036.2	994.7	41.52	24.957	
7,400.0	7,131.9	7,296.2	7,212.1	34.7	22.8	147.91	-1,006.5	301.6	1,054.5	1,012.4	42.08	25.059	
7,500.0	7,227.3	7,394.5	7,309.2	35.3	23.1	148.03	-1,021.1	306.6	1,072.7	1,030.1	42.64	25.158	
7,600.0	7,322.6	7,492.8	7,406.3	35.9	23.5	148.15	-1,035.7	311.5	1,090.9	1,047.7	43.20	25.255	
7,700.0	7,418.0	7,591.1	7,503.4	36.4	23.8	148.26	-1,050.4	316.4	1,109.2	1,065.4	43.75	25.349	
7,800.0	7,513.4	7,689.4	7,600.5	37.0	24.1	148.37	-1,065.0	321.3	1,127.4	1,083.1	44.31	25.441	
7,900.0	7,608.8	7,787.7	7,697.6	37.5	24.4	148.48	-1,079.6	326.3	1,145.6	1,100.8	44.87	25.531	
8,000.0	7,704.2	7,886.0	7,794.6	38.1	24.7	148.58	-1,094.2	331.2	1,163.9	1,118.5	45.43	25.619	
8,100.0	7,799.6	7,984.3	7,891.7	38.7	25.1	148.68	-1,108.8	336.1	1,182.1	1,136.1	45.99	25.704	
8,200.0	7,895.0	8,082.6	7,988.8	39.2	25.4	148.78	-1,123.4	341.0	1,200.4	1,153.8	46.55	25.788	
8,300.0	7,990.4	8,180.9	8,085.9	39.8	25.7	148.87	-1,138.0	345.9	1,218.6	1,171.5	47.11	25.869	
8,400.0	8,086.2	8,279.4	8,183.2	40.3	26.0	149.09	-1,152.6	350.9	1,235.8	1,188.1	47.67	25.924	
8,500.0	8,182.9	8,378.4	8,280.9	40.8	26.3	149.21	-1,167.3	355.8	1,249.9	1,201.7	48.25	25.903	
8,600.0	8,280.5	8,471.8	8,373.3	41.2	26.6	149.23	-1,181.1	360.5	1,261.2	1,212.4	48.83	25.827	
8,700.0	8,378.7	8,553.4	8,454.1	41.5	26.8	149.25	-1,191.4	364.0	1,270.6	1,221.3	49.30	25.772	
8,800.0	8,477.6	8,635.0	8,535.3	41.8	27.0	149.27	-1,199.5	366.7	1,278.4	1,228.7	49.69	25.727	
8,900.0	8,576.9	8,716.7	8,616.7	42.0	27.2	149.31	-1,205.5	368.7	1,284.6	1,234.6	50.01	25.690	
9,000.0	8,676.5	8,800.0	8,699.9	42.2	27.3	149.36	-1,209.3	370.0	1,289.3	1,239.0	50.25	25.660	
9,100.0	8,776.4	8,880.1	8,780.0	42.3	27.4	149.41	-1,210.8	370.5	1,292.3	1,241.9	50.40	25.642	
9,200.0	8,876.4	8,973.2	8,873.1	42.4	27.5	41.11	-1,210.9	370.4	1,293.5	1,242.9	50.55	25.587	
9,300.0	8,976.4	9,069.2	8,969.1	42.4	27.6	41.10	-1,211.1	369.9	1,293.7	1,242.9	50.78	25.478	
9,400.0	9,076.4	9,165.1	9,065.0	42.5	27.7	41.09	-1,211.6	369.1	1,293.9	1,242.8	51.01	25.366	
9,500.0	9,176.4	9,263.0	9,162.9	42.5	27.8	41.09	-1,212.2	368.0	1,294.0	1,242.7	51.25	25.250	
9,600.0	9,276.4	9,363.0	9,262.9	42.6	27.9	41.09	-1,212.9	366.8	1,294.0	1,242.5	51.49	25.129	
9,700.0	9,376.4	9,463.0	9,362.9	42.7	28.0	41.09	-1,213.6	365.6	1,294.0	1,242.2	51.74	25.008	
9,800.0	9,476.4	9,563.0	9,462.9	42.7	28.1	41.09	-1,214.3	364.4	1,294.0	1,242.0	51.99	24.888	
9,900.0	9,576.4	9,663.0	9,562.9	42.8	28.2	41.09	-1,215.0	363.2	1,294.0	1,241.7	52.24	24.768	
10,000.0	9,676.3	9,763.0	9,662.9	42.9	28.3	41.09	-1,215.7	362.0	1,294.0	1,241.5	52.50	24.649	
10,100.0	9,776.3	9,863.0	9,762.9	42.9	28.4	41.09	-1,216.4	360.8	1,294.0	1,241.2	52.75	24.531	
10,200.0	9,876.3	9,963.0	9,862.9	43.0	28.5	41.09	-1,217.1	359.6	1,294.0	1,240.9	53.00	24.413	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05C D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	9,976.3	10,063.0	9,962.8	43.1	28.6	41.09	-1,217.8	358.4	1,293.9	1,240.7	53.26	24.296	
10,400.0	10,076.3	10,163.0	10,062.8	43.1	28.8	41.09	-1,218.5	357.2	1,293.9	1,240.4	53.52	24.179	
10,500.0	10,176.3	10,263.0	10,162.8	43.2	28.9	41.09	-1,219.2	356.0	1,293.9	1,240.2	53.77	24.063	
10,600.0	10,276.3	10,363.0	10,262.8	43.3	29.0	41.09	-1,219.8	354.8	1,293.9	1,239.9	54.03	23.948	
10,700.0	10,376.3	10,463.0	10,362.8	43.3	29.1	41.09	-1,220.5	353.6	1,293.9	1,239.6	54.29	23.833	
10,800.0	10,476.3	10,563.0	10,462.8	43.4	29.2	41.09	-1,221.2	352.4	1,293.9	1,239.4	54.55	23.719	
10,900.0	10,576.3	10,663.0	10,562.8	43.5	29.3	41.09	-1,221.9	351.2	1,293.9	1,239.1	54.81	23.606	
11,000.0	10,676.2	10,763.0	10,662.8	43.5	29.4	41.09	-1,222.6	350.1	1,293.9	1,238.8	55.08	23.493	
11,100.0	10,776.2	10,863.0	10,762.8	43.6	29.5	41.09	-1,223.3	348.9	1,293.9	1,238.6	55.34	23.381	
11,200.0	10,876.2	10,963.0	10,862.8	43.7	29.7	41.09	-1,224.0	347.7	1,293.9	1,238.3	55.60	23.270	
11,300.0	10,976.2	11,063.0	10,962.8	43.7	29.8	41.09	-1,224.7	346.5	1,293.9	1,238.0	55.87	23.159	
11,400.0	11,076.2	11,163.0	11,062.7	43.8	29.9	41.09	-1,225.4	345.3	1,293.9	1,237.8	56.14	23.049	
11,500.0	11,176.2	11,263.0	11,162.7	43.9	30.0	41.09	-1,226.1	344.1	1,293.9	1,237.5	56.40	22.940	
11,600.0	11,276.2	11,363.0	11,262.7	44.0	30.1	41.09	-1,226.8	342.9	1,293.9	1,237.2	56.67	22.831	
11,700.0	11,376.2	11,463.0	11,362.7	44.0	30.3	41.09	-1,227.5	341.7	1,293.9	1,236.9	56.94	22.723	
11,800.0	11,476.2	11,563.0	11,462.7	44.1	30.4	41.09	-1,228.1	340.5	1,293.9	1,236.7	57.21	22.616	
11,900.0	11,576.2	11,663.0	11,562.7	44.2	30.5	41.09	-1,228.8	339.3	1,293.9	1,236.4	57.48	22.509	
12,000.0	11,676.2	11,763.0	11,662.7	44.3	30.6	41.09	-1,229.5	338.1	1,293.9	1,236.1	57.75	22.403	
12,100.0	11,776.1	11,863.0	11,762.7	44.3	30.7	41.09	-1,230.2	336.9	1,293.9	1,235.8	58.03	22.298	
12,165.2	11,841.4	11,928.3	11,827.9	44.4	30.8	41.09	-1,230.7	336.1	1,293.9	1,235.7	58.21	22.229	
12,200.0	11,876.1	11,946.4	11,846.0	44.4	30.8	41.09	-1,230.8	335.9	1,294.0	1,235.7	58.28	22.203	
12,229.9	11,906.0	11,946.4	11,846.0	44.4	30.8	41.09	-1,230.8	335.9	1,294.7	1,236.4	58.32	22.200	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05D D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-71.56	23.7	-71.0	74.8				
100.0	100.0	100.0	100.0	0.1	0.1	-71.56	23.7	-71.0	74.8	74.6	0.30	252.266	
200.0	200.0	200.0	200.0	0.3	0.3	-71.56	23.7	-71.0	74.8	74.2	0.65	115.906	
300.0	300.0	301.3	301.3	0.5	0.5	-72.76	21.9	-70.7	74.0	73.0	1.00	74.186	
400.0	400.0	402.3	402.1	0.7	0.7	-76.52	16.7	-69.6	71.6	70.2	1.35	53.027	
500.0	500.0	502.8	502.3	0.8	0.9	-83.27	8.0	-67.8	68.3	66.6	1.71	39.950	
600.0	600.0	602.6	601.3	1.0	1.2	-93.51	-4.0	-65.4	65.6	63.4	2.10	31.180	
660.5	660.5	662.5	660.5	1.1	1.4	-101.41	-12.8	-63.6	64.9	62.5	2.38	27.317	CC, ES
700.0	700.0	701.4	698.8	1.2	1.5	-107.14	-19.2	-62.3	65.3	62.7	2.57	25.388	
800.0	800.0	799.6	795.4	1.4	1.8	-122.13	-36.9	-58.8	69.6	66.4	3.12	22.275	
900.0	900.0	897.8	891.9	1.5	2.2	-134.82	-54.8	-55.2	78.2	74.5	3.70	21.155	
1,000.0	1,000.0	996.1	988.4	1.7	2.5	-144.67	-72.7	-51.5	89.9	85.6	4.25	21.142	
1,100.0	1,100.0	1,094.6	1,085.2	1.9	2.9	76.83	-90.7	-47.9	103.2	99.0	4.25	24.309	
1,200.0	1,199.8	1,193.5	1,182.4	2.1	3.2	73.20	-108.7	-44.3	116.5	111.9	4.61	25.254	
1,300.0	1,299.5	1,292.7	1,279.8	2.3	3.6	71.74	-126.7	-40.6	129.0	124.0	5.03	25.670	
1,400.0	1,398.7	1,392.0	1,377.4	2.5	4.0	71.88	-144.8	-37.0	140.5	135.0	5.50	25.556	
1,500.0	1,497.5	1,491.4	1,475.1	2.7	4.3	73.25	-162.9	-33.3	151.0	144.9	6.04	24.982	
1,600.0	1,595.6	1,590.7	1,572.6	3.0	4.7	75.63	-181.0	-29.7	160.6	153.9	6.68	24.055	
1,700.0	1,693.1	1,689.7	1,670.0	3.4	5.1	78.86	-199.1	-26.0	169.9	162.4	7.41	22.909	
1,800.0	1,789.6	1,788.5	1,767.0	3.8	5.4	82.82	-217.1	-22.4	179.2	170.9	8.26	21.693	
1,900.0	1,885.3	1,886.8	1,863.6	4.3	5.8	87.37	-235.0	-18.8	189.2	180.0	9.20	20.572	
2,000.0	1,980.7	1,985.0	1,960.1	4.8	6.1	91.84	-252.9	-15.2	200.4	190.2	10.15	19.734	
2,100.0	2,076.1	2,083.2	2,056.6	5.3	6.5	95.83	-270.8	-11.6	212.7	201.6	11.10	19.156	
2,200.0	2,171.5	2,181.4	2,153.1	5.8	6.9	99.37	-288.7	-8.0	225.9	213.9	12.03	18.771	
2,300.0	2,266.9	2,279.6	2,249.6	6.3	7.2	102.52	-306.5	-4.3	239.9	226.9	12.95	18.530	
2,400.0	2,362.3	2,377.8	2,346.0	6.8	7.6	105.32	-324.4	-0.7	254.5	240.7	13.84	18.395	
2,500.0	2,457.7	2,476.0	2,442.5	7.4	7.9	107.82	-342.3	2.9	269.7	254.9	14.71	18.337	
2,600.0	2,553.0	2,574.1	2,539.0	7.9	8.3	110.05	-360.2	6.5	285.3	269.7	15.56	18.336	SF
2,700.0	2,648.4	2,672.3	2,635.5	8.4	8.7	112.04	-378.1	10.1	301.3	284.9	16.39	18.377	
2,800.0	2,743.8	2,770.5	2,732.0	9.0	9.0	113.84	-396.0	13.7	317.6	300.4	17.21	18.448	
2,900.0	2,839.2	2,868.7	2,828.4	9.5	9.4	115.46	-413.9	17.3	334.2	316.1	18.02	18.541	
3,000.0	2,934.6	2,966.9	2,924.9	10.1	9.7	116.93	-431.8	20.9	351.0	332.2	18.82	18.650	
3,100.0	3,030.0	3,065.1	3,021.4	10.6	10.1	118.26	-449.7	24.5	368.0	348.4	19.61	18.770	
3,200.0	3,125.4	3,163.3	3,117.9	11.2	10.5	119.48	-467.6	28.2	385.2	364.9	20.39	18.897	
3,300.0	3,220.8	3,261.5	3,214.4	11.7	10.8	120.59	-485.4	31.8	402.6	381.5	21.16	19.029	
3,400.0	3,316.2	3,359.7	3,310.8	12.3	11.2	121.61	-503.3	35.4	420.1	398.2	21.92	19.163	
3,500.0	3,411.6	3,457.9	3,407.3	12.8	11.5	122.55	-521.2	39.0	437.7	415.1	22.68	19.298	
3,600.0	3,507.0	3,556.0	3,503.8	13.4	11.9	123.41	-539.1	42.6	455.5	432.0	23.44	19.434	
3,700.0	3,602.4	3,654.2	3,600.3	14.0	12.3	124.21	-557.0	46.2	473.3	449.1	24.19	19.568	
3,800.0	3,697.8	3,752.4	3,696.8	14.5	12.6	124.96	-574.9	49.8	491.2	466.3	24.93	19.701	
3,900.0	3,793.1	3,850.6	3,793.2	15.1	13.0	125.65	-592.8	53.4	509.2	483.5	25.68	19.831	
4,000.0	3,888.5	3,948.8	3,889.7	15.6	13.4	126.29	-610.7	57.0	527.2	500.8	26.42	19.959	
4,100.0	3,983.9	4,047.0	3,986.2	16.2	13.7	126.89	-628.6	60.7	545.3	518.2	27.15	20.084	
4,200.0	4,079.3	4,145.2	4,082.7	16.8	14.1	127.45	-646.4	64.3	563.5	535.6	27.89	20.207	
4,300.0	4,174.7	4,243.4	4,179.2	17.3	14.4	127.98	-664.3	67.9	581.7	553.1	28.62	20.326	
4,400.0	4,270.1	4,341.6	4,275.6	17.9	14.8	128.48	-682.2	71.5	600.0	570.6	29.35	20.443	
4,500.0	4,365.5	4,439.8	4,372.1	18.4	15.2	128.94	-700.1	75.1	618.3	588.2	30.08	20.556	
4,600.0	4,460.9	4,538.0	4,468.6	19.0	15.5	129.38	-718.0	78.7	636.6	605.8	30.80	20.666	
4,700.0	4,556.3	4,636.1	4,565.1	19.6	15.9	129.80	-735.9	82.3	655.0	623.4	31.53	20.774	
4,800.0	4,651.7	4,734.3	4,661.5	20.1	16.2	130.19	-753.8	85.9	673.4	641.1	32.25	20.878	
4,900.0	4,747.1	4,832.5	4,758.0	20.7	16.6	130.56	-771.7	89.5	691.8	658.8	32.97	20.979	
5,000.0	4,842.5	4,930.7	4,854.5	21.2	17.0	130.91	-789.6	93.1	710.2	676.5	33.70	21.078	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR05D D21 595 - DD - Plan #2

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,937.8	5,028.9	4,951.0	21.8	17.3	131.25	-807.4	96.8	728.7	694.3	34.42	21.174	
5,200.0	5,033.2	5,127.1	5,047.5	22.4	17.7	131.57	-825.3	100.4	747.2	712.1	35.14	21.267	
5,300.0	5,128.6	5,225.3	5,143.9	22.9	18.1	131.87	-843.2	104.0	765.7	729.9	35.85	21.357	
5,400.0	5,224.0	5,323.5	5,240.4	23.5	18.4	132.16	-861.1	107.6	784.3	747.7	36.57	21.445	
5,500.0	5,319.4	5,421.7	5,336.9	24.0	18.8	132.43	-879.0	111.2	802.9	765.6	37.29	21.530	
5,600.0	5,414.8	5,519.9	5,433.4	24.6	19.1	132.70	-896.9	114.8	821.4	783.4	38.01	21.613	
5,700.0	5,510.2	5,618.1	5,529.9	25.2	19.5	132.95	-914.8	118.4	840.0	801.3	38.72	21.694	
5,800.0	5,605.6	5,716.2	5,626.3	25.7	19.9	133.19	-932.7	122.0	858.6	819.2	39.44	21.772	
5,900.0	5,701.0	5,814.4	5,722.8	26.3	20.2	133.42	-950.6	125.6	877.3	837.1	40.15	21.849	
6,000.0	5,796.4	5,912.6	5,819.3	26.9	20.6	133.64	-968.4	129.3	895.9	855.0	40.87	21.923	
6,100.0	5,891.8	6,010.8	5,915.8	27.4	21.0	133.85	-986.3	132.9	914.5	873.0	41.58	21.995	
6,200.0	5,987.2	6,109.0	6,012.3	28.0	21.3	134.05	-1,004.2	136.5	933.2	890.9	42.29	22.066	
6,300.0	6,082.5	6,207.2	6,108.7	28.5	21.7	134.25	-1,022.1	140.1	951.9	908.9	43.01	22.134	
6,400.0	6,177.9	6,305.4	6,205.2	29.1	22.0	134.43	-1,040.0	143.7	970.6	926.8	43.72	22.201	
6,500.0	6,273.3	6,403.6	6,301.7	29.7	22.4	134.61	-1,057.9	147.3	989.3	944.8	44.43	22.266	
6,600.0	6,368.7	6,501.8	6,398.2	30.2	22.8	134.79	-1,075.8	150.9	1,008.0	962.8	45.14	22.329	
6,700.0	6,464.1	6,600.0	6,494.7	30.8	23.1	134.96	-1,093.7	154.5	1,026.7	980.8	45.85	22.390	
6,800.0	6,559.5	6,698.2	6,591.1	31.4	23.5	135.12	-1,111.6	158.1	1,045.4	998.8	46.56	22.450	
6,900.0	6,654.9	6,796.3	6,687.6	31.9	23.8	135.27	-1,129.4	161.8	1,064.1	1,016.8	47.28	22.509	
7,000.0	6,750.3	6,894.5	6,784.1	32.5	24.2	135.42	-1,147.3	165.4	1,082.8	1,034.9	47.99	22.566	
7,100.0	6,845.7	6,992.7	6,880.6	33.0	24.6	135.57	-1,165.2	169.0	1,101.6	1,052.9	48.70	22.622	
7,200.0	6,941.1	7,090.9	6,977.1	33.6	24.9	135.71	-1,183.1	172.6	1,120.3	1,070.9	49.41	22.676	
7,300.0	7,036.5	7,189.1	7,073.5	34.2	25.3	135.85	-1,201.0	176.2	1,139.1	1,089.0	50.12	22.729	
7,400.0	7,131.9	7,287.3	7,170.0	34.7	25.7	135.98	-1,218.9	179.8	1,157.8	1,107.0	50.83	22.781	
7,500.0	7,227.3	7,385.5	7,266.5	35.3	26.0	136.10	-1,236.8	183.4	1,176.6	1,125.1	51.53	22.831	
7,600.0	7,322.6	7,483.7	7,363.0	35.9	26.4	136.23	-1,254.7	187.0	1,195.4	1,143.1	52.24	22.881	
7,700.0	7,418.0	7,581.9	7,459.5	36.4	26.7	136.35	-1,272.6	190.6	1,214.2	1,161.2	52.95	22.929	
7,800.0	7,513.4	7,680.1	7,555.9	37.0	27.1	136.46	-1,290.4	194.3	1,232.9	1,179.3	53.66	22.976	
7,900.0	7,608.8	7,778.3	7,652.4	37.5	27.5	136.57	-1,308.3	197.9	1,251.7	1,197.3	54.37	23.022	
8,000.0	7,704.2	7,876.4	7,748.9	38.1	27.8	136.68	-1,326.2	201.5	1,270.5	1,215.4	55.08	23.067	
8,100.0	7,799.6	7,974.6	7,845.4	38.7	28.2	136.79	-1,344.1	205.1	1,289.3	1,233.5	55.79	23.111	
8,200.0	7,895.0	8,072.8	7,941.9	39.2	28.5	136.89	-1,362.0	208.7	1,308.1	1,251.6	56.50	23.154	
8,300.0	7,990.4	8,171.0	8,038.3	39.8	28.9	136.99	-1,379.9	212.3	1,326.9	1,269.7	57.20	23.196	
8,400.0	8,086.2	8,269.4	8,135.0	40.3	29.3	137.27	-1,397.8	215.9	1,344.7	1,286.8	57.91	23.222	
8,500.0	8,182.9	8,368.2	8,232.1	40.8	29.6	137.43	-1,415.8	219.6	1,360.0	1,301.4	58.62	23.201	
8,600.0	8,280.5	8,460.8	8,323.2	41.2	29.9	137.51	-1,431.8	222.8	1,373.0	1,313.7	59.26	23.167	
8,700.0	8,378.7	8,551.8	8,413.2	41.5	30.2	137.59	-1,444.8	225.4	1,384.0	1,324.2	59.81	23.141	
8,800.0	8,477.6	8,642.9	8,503.8	41.8	30.4	137.67	-1,455.1	227.5	1,393.0	1,332.8	60.25	23.120	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR06B D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	108.35	-14.2	42.8	45.1				
100.0	100.0	100.0	100.0	0.1	0.1	108.35	-14.2	42.8	45.1	44.8	0.30	152.081	
200.0	200.0	200.0	200.0	0.3	0.3	108.35	-14.2	42.8	45.1	44.5	0.65	69.875	
300.0	300.0	300.0	300.0	0.5	0.5	108.35	-14.2	42.8	45.1	44.1	0.99	45.357	
400.0	400.0	400.0	400.0	0.7	0.7	108.35	-14.2	42.8	45.1	43.8	1.34	33.576	
500.0	500.0	500.0	500.0	0.8	0.8	108.35	-14.2	42.8	45.1	43.4	1.69	26.653	CC, ES
600.0	600.0	598.4	598.4	1.0	1.0	108.64	-15.0	44.3	46.8	44.8	2.04	22.953	
700.0	700.0	696.6	696.5	1.2	1.2	109.41	-17.2	48.9	51.9	49.5	2.39	21.717	
800.0	800.0	794.4	793.8	1.4	1.4	110.39	-20.9	56.3	60.4	57.7	2.75	21.964	
900.0	900.0	891.4	890.2	1.5	1.6	111.38	-26.1	66.7	72.3	69.2	3.13	23.127	
1,000.0	1,000.0	987.6	985.2	1.7	1.9	112.25	-32.7	79.9	87.6	84.0	3.52	24.844	
1,100.0	1,100.0	1,084.2	1,080.2	1.9	2.2	-18.93	-40.6	95.7	104.2	100.5	3.76	27.710	
1,200.0	1,199.8	1,183.2	1,177.4	2.1	2.6	-19.05	-49.0	112.6	118.3	114.2	4.11	28.790	
1,300.0	1,299.5	1,282.6	1,275.0	2.3	2.9	-19.67	-57.4	129.5	129.1	124.7	4.46	28.960	
1,400.0	1,398.7	1,382.3	1,372.8	2.5	3.2	-20.70	-65.9	146.4	136.7	131.9	4.81	28.403	
1,500.0	1,497.5	1,482.1	1,470.9	2.7	3.6	-22.17	-74.3	163.4	141.1	135.9	5.18	27.253	
1,600.0	1,595.6	1,582.0	1,568.9	3.0	4.0	-24.12	-82.8	180.4	142.4	136.8	5.56	25.601	
1,700.0	1,693.1	1,681.8	1,666.9	3.4	4.3	-26.69	-91.3	197.4	140.7	134.7	5.99	23.512	
1,800.0	1,789.6	1,781.3	1,764.6	3.8	4.7	-30.04	-99.7	214.3	136.3	129.8	6.48	21.039	
1,900.0	1,885.3	1,880.6	1,862.1	4.3	5.1	-34.43	-108.2	231.2	129.6	122.5	7.10	18.263	
2,000.0	1,980.7	1,979.7	1,959.4	4.8	5.4	-39.46	-116.6	248.1	123.0	115.1	7.86	15.645	
2,100.0	2,076.1	2,078.9	2,056.8	5.3	5.8	-45.02	-125.0	264.9	117.4	108.7	8.77	13.385	
2,200.0	2,171.5	2,178.1	2,154.1	5.8	6.2	-51.06	-133.4	281.8	113.1	103.3	9.84	11.499	
2,300.0	2,266.9	2,277.2	2,251.5	6.3	6.5	-57.49	-141.8	298.7	110.1	99.1	11.03	9.989	
2,400.0	2,362.3	2,376.4	2,348.8	6.8	6.9	-64.18	-150.2	315.5	108.6	96.3	12.30	8.831	
2,447.3	2,407.4	2,423.3	2,394.9	7.1	7.1	-67.39	-154.2	323.5	108.5	95.5	12.92	8.395	
2,500.0	2,457.7	2,475.5	2,446.2	7.4	7.3	-70.96	-158.6	332.4	108.7	95.1	13.61	7.986	
2,600.0	2,553.0	2,574.7	2,543.5	7.9	7.7	-77.64	-167.0	349.3	110.3	95.4	14.89	7.406	
2,700.0	2,648.4	2,673.8	2,640.9	8.4	8.0	-84.05	-175.4	366.1	113.3	97.2	16.09	7.041	
2,800.0	2,743.8	2,773.0	2,738.2	9.0	8.4	-90.06	-183.9	383.0	117.7	100.5	17.19	6.846	
2,900.0	2,839.2	2,872.2	2,835.6	9.5	8.8	-95.59	-192.3	399.9	123.3	105.1	18.18	6.782	SF
3,000.0	2,934.6	2,971.3	2,932.9	10.1	9.1	-100.60	-200.7	416.7	130.0	110.9	19.07	6.818	
3,100.0	3,030.0	3,070.5	3,030.3	10.6	9.5	-105.10	-209.1	433.6	137.5	117.7	19.85	6.928	
3,200.0	3,125.4	3,169.6	3,127.6	11.2	9.9	-109.11	-217.5	450.5	145.9	125.3	20.57	7.093	
3,300.0	3,220.8	3,268.8	3,225.0	11.7	10.3	-112.68	-225.9	467.3	154.8	133.6	21.22	7.298	
3,400.0	3,316.2	3,367.9	3,322.3	12.3	10.6	-115.85	-234.3	484.2	164.3	142.5	21.82	7.532	
3,500.0	3,411.6	3,467.1	3,419.7	12.8	11.0	-118.66	-242.7	501.1	174.3	151.9	22.39	7.784	
3,600.0	3,507.0	3,566.3	3,517.0	13.4	11.4	-121.17	-251.1	517.9	184.6	161.7	22.93	8.050	
3,700.0	3,602.4	3,665.4	3,614.4	14.0	11.8	-123.41	-259.6	534.8	195.2	171.8	23.46	8.323	
3,800.0	3,697.8	3,764.6	3,711.7	14.5	12.1	-125.42	-268.0	551.6	206.1	182.2	23.97	8.601	
3,900.0	3,793.1	3,863.7	3,809.1	15.1	12.5	-127.23	-276.4	568.5	217.3	192.8	24.47	8.879	
4,000.0	3,888.5	3,962.9	3,906.4	15.6	12.9	-128.86	-284.8	585.4	228.6	203.6	24.97	9.156	
4,100.0	3,983.9	4,062.0	4,003.8	16.2	13.3	-130.33	-293.2	602.2	240.1	214.6	25.46	9.430	
4,200.0	4,079.3	4,161.2	4,101.1	16.8	13.6	-131.67	-301.6	619.1	251.7	225.8	25.95	9.700	
4,300.0	4,174.7	4,260.4	4,198.5	17.3	14.0	-132.89	-310.0	636.0	263.5	237.0	26.44	9.965	
4,400.0	4,270.1	4,359.5	4,295.8	17.9	14.4	-134.01	-318.4	652.8	275.3	248.4	26.93	10.225	
4,500.0	4,365.5	4,458.7	4,393.2	18.4	14.8	-135.03	-326.8	669.7	287.3	259.9	27.42	10.478	
4,600.0	4,460.9	4,557.8	4,490.5	19.0	15.1	-135.98	-335.3	686.6	299.3	271.4	27.91	10.726	
4,700.0	4,556.3	4,657.0	4,587.9	19.6	15.5	-136.85	-343.7	703.4	311.4	283.0	28.40	10.967	
4,800.0	4,651.7	4,756.1	4,685.2	20.1	15.9	-137.65	-352.1	720.3	323.6	294.7	28.89	11.202	
4,900.0	4,747.1	4,855.3	4,782.6	20.7	16.3	-138.40	-360.5	737.2	335.8	306.5	29.38	11.430	
5,000.0	4,842.5	4,954.5	4,879.9	21.2	16.6	-139.09	-368.9	754.0	348.1	318.3	29.88	11.652	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR06B D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,937.8	5,053.6	4,977.3	21.8	17.0	-139.74	-377.3	770.9	360.5	330.1	30.37	11.868	
5,200.0	5,033.2	5,152.8	5,074.6	22.4	17.4	-140.34	-385.7	787.8	372.9	342.0	30.87	12.078	
5,300.0	5,128.6	5,251.9	5,172.0	22.9	17.8	-140.90	-394.1	804.6	385.3	353.9	31.37	12.282	
5,400.0	5,224.0	5,351.1	5,269.3	23.5	18.1	-141.43	-402.5	821.5	397.7	365.9	31.87	12.479	
5,500.0	5,319.4	5,450.2	5,366.7	24.0	18.5	-141.93	-410.9	838.4	410.2	377.8	32.37	12.671	
5,600.0	5,414.8	5,549.4	5,464.0	24.6	18.9	-142.40	-419.4	855.2	422.7	389.8	32.88	12.858	
5,700.0	5,510.2	5,648.5	5,561.3	25.2	19.3	-142.84	-427.8	872.1	435.3	401.9	33.38	13.039	
5,800.0	5,605.6	5,747.7	5,658.7	25.7	19.6	-143.25	-436.2	889.0	447.8	413.9	33.89	13.215	
5,900.0	5,701.0	5,846.9	5,756.0	26.3	20.0	-143.65	-444.6	905.8	460.4	426.0	34.39	13.387	
6,000.0	5,796.4	5,946.0	5,853.4	26.9	20.4	-144.02	-453.0	922.7	473.0	438.1	34.90	13.553	
6,100.0	5,891.8	6,045.2	5,950.7	27.4	20.8	-144.37	-461.4	939.6	485.6	450.2	35.41	13.714	
6,200.0	5,987.2	6,144.3	6,048.1	28.0	21.1	-144.71	-469.8	956.4	498.3	462.4	35.92	13.871	
6,300.0	6,082.5	6,243.5	6,145.4	28.5	21.5	-145.03	-478.2	973.3	510.9	474.5	36.43	14.024	
6,400.0	6,177.9	6,342.6	6,242.8	29.1	21.9	-145.33	-486.6	990.1	523.6	486.7	36.94	14.173	
6,500.0	6,273.3	6,441.8	6,340.1	29.7	22.3	-145.62	-495.1	1,007.0	536.3	498.8	37.46	14.317	
6,600.0	6,368.7	6,541.0	6,437.5	30.2	22.6	-145.90	-503.5	1,023.9	549.0	511.0	37.97	14.458	
6,700.0	6,464.1	6,640.1	6,534.8	30.8	23.0	-146.16	-511.9	1,040.7	561.7	523.2	38.49	14.595	
6,800.0	6,559.5	6,739.3	6,632.2	31.4	23.4	-146.41	-520.3	1,057.6	574.4	535.4	39.00	14.728	
6,900.0	6,654.9	6,838.4	6,729.5	31.9	23.8	-146.65	-528.7	1,074.5	587.1	547.6	39.52	14.858	
7,000.0	6,750.3	6,937.6	6,826.9	32.5	24.1	-146.88	-537.1	1,091.3	599.9	559.9	40.03	14.984	
7,100.0	6,845.7	7,036.7	6,924.2	33.0	24.5	-147.10	-545.5	1,108.2	612.6	572.1	40.55	15.108	
7,200.0	6,941.1	7,135.9	7,021.6	33.6	24.9	-147.31	-553.9	1,125.1	625.4	584.3	41.07	15.228	
7,300.0	7,036.5	7,235.1	7,118.9	34.2	25.3	-147.52	-562.3	1,141.9	638.2	596.6	41.59	15.345	
7,400.0	7,131.9	7,334.2	7,216.3	34.7	25.6	-147.71	-570.8	1,158.8	650.9	608.8	42.11	15.459	
7,500.0	7,227.3	7,433.4	7,313.6	35.3	26.0	-147.90	-579.2	1,175.7	663.7	621.1	42.63	15.570	
7,600.0	7,322.6	7,532.5	7,411.0	35.9	26.4	-148.08	-587.6	1,192.5	676.5	633.4	43.15	15.679	
7,700.0	7,418.0	7,631.7	7,508.3	36.4	26.8	-148.26	-596.0	1,209.4	689.3	645.6	43.67	15.785	
7,800.0	7,513.4	7,730.8	7,605.7	37.0	27.1	-148.42	-604.4	1,226.3	702.1	657.9	44.19	15.888	
7,900.0	7,608.8	7,830.0	7,703.0	37.5	27.5	-148.59	-612.8	1,243.1	714.9	670.2	44.71	15.989	
8,000.0	7,704.2	7,929.2	7,800.4	38.1	27.9	-148.74	-621.2	1,260.0	727.7	682.5	45.23	16.088	
8,100.0	7,799.6	8,028.3	7,897.7	38.7	28.3	-148.89	-629.6	1,276.9	740.5	694.8	45.76	16.184	
8,200.0	7,895.0	8,127.5	7,995.1	39.2	28.6	-149.04	-638.0	1,293.7	753.4	707.1	46.28	16.278	
8,300.0	7,990.4	8,226.6	8,092.4	39.8	29.0	-149.18	-646.5	1,310.6	766.2	719.4	46.80	16.370	
8,400.0	8,086.2	8,325.9	8,189.9	40.3	29.4	-149.37	-654.9	1,327.5	777.9	730.5	47.34	16.432	
8,500.0	8,182.9	8,422.1	8,284.3	40.8	29.7	-149.42	-663.0	1,343.8	786.6	738.7	47.92	16.416	
8,600.0	8,280.5	8,500.0	8,361.1	41.2	30.0	-149.44	-668.9	1,355.7	793.8	745.4	48.40	16.401	
8,700.0	8,378.7	8,589.2	8,449.4	41.5	30.2	-149.46	-674.6	1,367.0	800.0	751.1	48.84	16.379	
8,800.0	8,477.6	8,672.7	8,532.3	41.8	30.4	-149.49	-678.7	1,375.3	805.2	756.0	49.19	16.369	
8,900.0	8,576.9	8,756.1	8,615.5	42.0	30.6	-149.54	-681.8	1,381.5	809.5	760.0	49.47	16.362	
9,000.0	8,676.5	8,839.5	8,698.8	42.2	30.7	-149.59	-683.8	1,385.5	812.8	763.1	49.69	16.358	
9,100.0	8,776.4	8,922.9	8,782.2	42.3	30.8	-149.65	-684.7	1,387.3	815.1	765.3	49.83	16.357	
9,200.0	8,876.4	9,017.6	8,876.9	42.4	30.9	101.97	-684.9	1,387.4	816.0	766.1	49.96	16.333	
9,300.0	8,976.4	9,118.4	8,977.6	42.4	31.0	101.95	-685.1	1,387.0	816.0	765.8	50.16	16.268	
9,400.0	9,076.4	9,219.1	9,078.4	42.5	31.0	101.93	-685.6	1,386.1	816.0	765.6	50.35	16.206	
9,500.0	9,176.4	9,319.5	9,178.7	42.5	31.1	101.92	-686.3	1,385.0	815.9	765.4	50.53	16.146	
9,525.2	9,201.6	9,344.7	9,204.0	42.6	31.1	101.92	-686.4	1,384.7	815.9	765.3	50.58	16.131	
9,600.0	9,276.4	9,419.5	9,278.7	42.6	31.2	101.92	-686.9	1,383.8	815.9	765.2	50.72	16.085	
9,700.0	9,376.4	9,519.5	9,378.7	42.7	31.3	101.92	-687.6	1,382.6	815.9	765.0	50.92	16.024	
9,800.0	9,476.4	9,619.5	9,478.7	42.7	31.4	101.92	-688.3	1,381.4	815.9	764.8	51.11	15.963	
9,900.0	9,576.4	9,719.5	9,578.7	42.8	31.5	101.92	-689.0	1,380.2	815.9	764.6	51.31	15.902	
10,000.0	9,676.3	9,819.5	9,678.7	42.9	31.5	101.92	-689.7	1,379.0	815.9	764.4	51.51	15.840	
10,100.0	9,776.3	9,919.5	9,778.7	42.9	31.6	101.92	-690.4	1,377.8	815.9	764.2	51.71	15.779	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR06B D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,200.0	9,876.3	10,019.5	9,878.7	43.0	31.7	101.92	-691.1	1,376.6	815.9	764.0	51.91	15.718	
10,300.0	9,976.3	10,119.5	9,978.6	43.1	31.8	101.92	-691.8	1,375.4	815.9	763.8	52.12	15.656	
10,400.0	10,076.3	10,219.5	10,078.6	43.1	31.9	101.92	-692.5	1,374.2	815.9	763.6	52.32	15.595	
10,500.0	10,176.3	10,319.5	10,178.6	43.2	32.0	101.92	-693.2	1,373.0	815.9	763.4	52.53	15.533	
10,600.0	10,276.3	10,419.5	10,278.6	43.3	32.1	101.93	-693.9	1,371.8	815.9	763.2	52.74	15.472	
10,700.0	10,376.3	10,519.5	10,378.6	43.3	32.1	101.93	-694.5	1,370.6	815.9	763.0	52.95	15.411	
10,800.0	10,476.3	10,619.5	10,478.6	43.4	32.2	101.93	-695.2	1,369.4	815.9	762.8	53.16	15.349	
10,900.0	10,576.3	10,719.5	10,578.6	43.5	32.3	101.93	-695.9	1,368.2	815.9	762.6	53.37	15.288	
11,000.0	10,676.2	10,819.5	10,678.6	43.5	32.4	101.93	-696.6	1,367.0	815.9	762.3	53.58	15.227	
11,100.0	10,776.2	10,919.5	10,778.6	43.6	32.5	101.93	-697.3	1,365.8	815.9	762.1	53.80	15.166	
11,200.0	10,876.2	11,019.5	10,878.6	43.7	32.6	101.93	-698.0	1,364.6	815.9	761.9	54.02	15.105	
11,300.0	10,976.2	11,119.5	10,978.6	43.7	32.7	101.93	-698.7	1,363.4	815.9	761.7	54.24	15.044	
11,400.0	11,076.2	11,219.5	11,078.5	43.8	32.8	101.93	-699.4	1,362.2	815.9	761.5	54.46	14.984	
11,500.0	11,176.2	11,319.5	11,178.5	43.9	32.9	101.93	-700.1	1,361.0	815.9	761.3	54.68	14.923	
11,600.0	11,276.2	11,419.5	11,278.5	44.0	33.0	101.93	-700.8	1,359.8	815.9	761.0	54.90	14.862	
11,700.0	11,376.2	11,519.5	11,378.5	44.0	33.1	101.93	-701.5	1,358.6	815.9	760.8	55.12	14.802	
11,800.0	11,476.2	11,619.5	11,478.5	44.1	33.2	101.93	-702.1	1,357.4	815.9	760.6	55.35	14.742	
11,900.0	11,576.2	11,719.5	11,578.5	44.2	33.3	101.93	-702.8	1,356.2	815.9	760.4	55.58	14.682	
12,000.0	11,676.2	11,819.5	11,678.5	44.3	33.4	101.93	-703.5	1,355.0	815.9	760.1	55.80	14.622	
12,100.0	11,776.1	11,919.5	11,778.5	44.3	33.5	101.93	-704.2	1,353.8	815.9	759.9	56.03	14.562	
12,154.0	11,830.2	11,973.5	11,832.5	44.4	33.5	101.93	-704.6	1,353.1	815.9	759.8	56.16	14.529	
12,200.0	11,876.1	12,002.0	11,861.0	44.4	33.5	101.93	-704.8	1,352.8	816.1	759.9	56.24	14.511	
12,229.9	11,906.0	12,002.0	11,861.0	44.4	33.5	101.93	-704.8	1,352.8	817.3	761.0	56.28	14.523	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR06D D21 595 - DD - Plan #2 — **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	108.41	-9.5	28.5	30.0				
100.0	100.0	100.0	100.0	0.1	0.1	108.41	-9.5	28.5	30.0	29.7	0.30	101.087	
200.0	200.0	200.0	200.0	0.3	0.3	108.41	-9.5	28.5	30.0	29.3	0.65	46.445	CC, ES
300.0	300.0	299.5	299.4	0.5	0.5	111.23	-11.2	28.8	30.9	29.9	0.99	31.042	
400.0	400.0	398.2	398.1	0.7	0.7	116.27	-15.2	30.9	34.5	33.2	1.34	25.716	
500.0	500.0	496.6	496.2	0.8	0.9	119.80	-20.7	36.1	41.8	40.1	1.70	24.602	
600.0	600.0	594.5	593.4	1.0	1.1	121.73	-27.4	44.4	52.6	50.5	2.07	25.333	
700.0	700.0	691.5	689.5	1.2	1.4	122.55	-35.4	55.5	66.7	64.2	2.48	26.926	
800.0	800.0	787.4	784.0	1.4	1.8	122.73	-44.7	69.5	84.2	81.2	2.91	28.913	
900.0	900.0	882.2	876.7	1.5	2.1	122.56	-55.0	86.1	104.8	101.4	3.38	31.055	
1,000.0	1,000.0	975.8	967.5	1.7	2.5	122.24	-66.4	105.3	128.7	124.8	3.86	33.291	
1,100.0	1,100.0	1,072.9	1,061.6	1.9	3.0	-9.80	-78.8	126.5	152.2	148.5	3.74	40.654	
1,200.0	1,199.8	1,170.9	1,156.3	2.1	3.4	-10.25	-91.3	147.8	172.4	168.3	4.09	42.154	
1,300.0	1,299.5	1,269.4	1,251.7	2.3	3.9	-10.79	-103.9	169.2	189.3	184.8	4.44	42.654	
1,400.0	1,398.7	1,368.5	1,347.5	2.5	4.4	-11.44	-116.5	190.8	202.8	198.0	4.79	42.366	
1,500.0	1,497.5	1,467.9	1,443.7	2.7	4.8	-12.21	-129.2	212.5	212.9	207.8	5.14	41.440	
1,600.0	1,595.6	1,567.6	1,540.2	3.0	5.3	-13.13	-141.9	234.2	219.7	214.2	5.49	39.983	
1,700.0	1,693.1	1,667.4	1,636.8	3.4	5.8	-14.21	-154.7	255.9	223.1	217.3	5.86	38.069	
1,800.0	1,789.6	1,767.3	1,733.5	3.8	6.3	-15.52	-167.4	277.7	223.3	217.1	6.25	35.750	
1,900.0	1,885.3	1,867.1	1,830.0	4.3	6.7	-17.08	-180.2	299.4	220.4	213.7	6.67	33.053	
2,000.0	1,980.7	1,966.8	1,926.5	4.8	7.2	-18.75	-192.9	321.1	216.7	209.6	7.14	30.361	
2,100.0	2,076.1	2,066.5	2,023.0	5.3	7.7	-20.48	-205.6	342.8	213.3	205.6	7.65	27.883	
2,200.0	2,171.5	2,166.3	2,119.5	5.8	8.2	-22.26	-218.3	364.5	210.0	201.8	8.20	25.598	
2,300.0	2,266.9	2,266.0	2,216.0	6.3	8.7	-24.10	-231.1	386.2	207.0	198.2	8.81	23.490	
2,400.0	2,362.3	2,365.7	2,312.5	6.8	9.1	-25.99	-243.8	408.0	204.1	194.7	9.47	21.551	
2,500.0	2,457.7	2,465.5	2,409.0	7.4	9.6	-27.93	-256.5	429.7	201.5	191.3	10.19	19.772	
2,600.0	2,553.0	2,565.2	2,505.5	7.9	10.1	-29.92	-269.2	451.4	199.2	188.2	10.98	18.146	
2,700.0	2,648.4	2,664.9	2,602.0	8.4	10.6	-31.95	-282.0	473.1	197.1	185.2	11.82	16.667	
2,800.0	2,743.8	2,764.6	2,698.5	9.0	11.1	-34.02	-294.7	494.8	195.2	182.5	12.74	15.328	
2,900.0	2,839.2	2,864.4	2,795.0	9.5	11.5	-36.13	-307.4	516.5	193.6	179.9	13.71	14.121	
3,000.0	2,934.6	2,964.1	2,891.5	10.1	12.0	-38.27	-320.1	538.3	192.3	177.5	14.75	13.037	
3,100.0	3,030.0	3,063.8	2,988.0	10.6	12.5	-40.44	-332.9	560.0	191.2	175.4	15.85	12.067	
3,200.0	3,125.4	3,163.6	3,084.5	11.2	13.0	-42.63	-345.6	581.7	190.5	173.5	17.00	11.203	
3,300.0	3,220.8	3,263.3	3,181.0	11.7	13.5	-44.84	-358.3	603.4	190.0	171.8	18.21	10.434	
3,400.0	3,316.2	3,363.0	3,277.5	12.3	13.9	-47.05	-371.0	625.1	189.7	170.3	19.46	9.752	
3,424.0	3,339.1	3,387.0	3,300.7	12.4	14.1	-47.58	-374.1	630.3	189.7	170.0	19.76	9.600	
3,500.0	3,411.6	3,462.8	3,374.0	12.8	14.4	-49.27	-383.8	646.8	189.8	169.1	20.75	9.148	
3,600.0	3,507.0	3,562.5	3,470.5	13.4	14.9	-51.47	-396.5	668.6	190.2	168.1	22.08	8.615	
3,700.0	3,602.4	3,662.2	3,567.0	14.0	15.4	-53.67	-409.2	690.3	190.8	167.4	23.43	8.144	
3,800.0	3,697.8	3,761.9	3,663.5	14.5	15.9	-55.85	-421.9	712.0	191.7	166.9	24.81	7.729	
3,900.0	3,793.1	3,861.7	3,760.0	15.1	16.3	-58.01	-434.7	733.7	192.9	166.7	26.20	7.363	
4,000.0	3,888.5	3,961.4	3,856.5	15.6	16.8	-60.13	-447.4	755.4	194.4	166.8	27.61	7.042	
4,100.0	3,983.9	4,061.1	3,953.0	16.2	17.3	-62.23	-460.1	777.1	196.1	167.1	29.02	6.759	
4,200.0	4,079.3	4,160.9	4,049.5	16.8	17.8	-64.28	-472.9	798.8	198.1	167.7	30.43	6.512	
4,300.0	4,174.7	4,260.6	4,146.0	17.3	18.3	-66.29	-485.6	820.6	200.4	168.5	31.83	6.295	
4,400.0	4,270.1	4,360.3	4,242.5	17.9	18.8	-68.25	-498.3	842.3	202.9	169.6	33.23	6.105	
4,500.0	4,365.5	4,460.0	4,339.0	18.4	19.2	-70.17	-511.0	864.0	205.6	171.0	34.61	5.939	
4,600.0	4,460.9	4,559.8	4,435.5	19.0	19.7	-72.03	-523.8	885.7	208.5	172.5	35.98	5.795	
4,700.0	4,556.3	4,659.5	4,532.0	19.6	20.2	-73.84	-536.5	907.4	211.7	174.3	37.34	5.669	
4,800.0	4,651.7	4,759.2	4,628.5	20.1	20.7	-75.59	-549.2	929.1	215.0	176.4	38.67	5.561	
4,900.0	4,747.1	4,859.0	4,725.0	20.7	21.2	-77.29	-561.9	950.9	218.6	178.6	39.98	5.467	
5,000.0	4,842.5	4,958.7	4,821.5	21.2	21.6	-78.93	-574.7	972.6	222.3	181.1	41.28	5.387	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR06D D21 595 - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,937.8	5,058.4	4,918.0	21.8	22.1	-80.52	-587.4	994.3	226.3	183.7	42.55	5.318	
5,200.0	5,033.2	5,158.1	5,014.5	22.4	22.6	-82.05	-600.1	1,016.0	230.3	186.5	43.80	5.260	
5,300.0	5,128.6	5,257.9	5,111.0	22.9	23.1	-83.53	-612.8	1,037.7	234.6	189.6	45.02	5.211	
5,400.0	5,224.0	5,357.6	5,207.5	23.5	23.6	-84.96	-625.6	1,059.4	239.0	192.8	46.23	5.170	
5,500.0	5,319.4	5,457.3	5,304.0	24.0	24.1	-86.33	-638.3	1,081.2	243.5	196.1	47.41	5.136	
5,600.0	5,414.8	5,557.1	5,400.5	24.6	24.5	-87.65	-651.0	1,102.9	248.2	199.6	48.58	5.110	
5,700.0	5,510.2	5,656.8	5,497.0	25.2	25.0	-88.92	-663.7	1,124.6	253.0	203.3	49.72	5.089	
5,800.0	5,605.6	5,756.5	5,593.5	25.7	25.5	-90.15	-676.5	1,146.3	257.9	207.1	50.84	5.073	
5,900.0	5,701.0	5,856.3	5,690.0	26.3	26.0	-91.33	-689.2	1,168.0	263.0	211.0	51.95	5.062	
6,000.0	5,796.4	5,956.0	5,786.5	26.9	26.5	-92.46	-701.9	1,189.7	268.1	215.1	53.04	5.055	
6,100.0	5,891.8	6,055.7	5,883.0	27.4	26.9	-93.55	-714.6	1,211.5	273.4	219.3	54.11	5.052 SF	
6,200.0	5,987.2	6,155.4	5,979.5	28.0	27.4	-94.60	-727.4	1,233.2	278.7	223.5	55.16	5.052	
6,300.0	6,082.5	6,255.2	6,076.0	28.5	27.9	-95.61	-740.1	1,254.9	284.1	227.9	56.20	5.056	
6,400.0	6,177.9	6,354.9	6,172.5	29.1	28.4	-96.58	-752.8	1,276.6	289.6	232.4	57.23	5.061	
6,500.0	6,273.3	6,454.6	6,269.0	29.7	28.9	-97.52	-765.6	1,298.3	295.2	237.0	58.24	5.070	
6,600.0	6,368.7	6,554.4	6,365.5	30.2	29.4	-98.42	-778.3	1,320.0	300.9	241.7	59.24	5.080	
6,700.0	6,464.1	6,654.1	6,462.0	30.8	29.8	-99.28	-791.0	1,341.8	306.7	246.4	60.23	5.092	
6,800.0	6,559.5	6,753.8	6,558.5	31.4	30.3	-100.12	-803.7	1,363.5	312.5	251.3	61.20	5.106	
6,900.0	6,654.9	6,853.5	6,655.0	31.9	30.8	-100.92	-816.5	1,385.2	318.3	256.2	62.17	5.121	
7,000.0	6,750.3	6,953.3	6,751.5	32.5	31.3	-101.70	-829.2	1,406.9	324.3	261.2	63.12	5.137	
7,100.0	6,845.7	7,053.0	6,848.0	33.0	31.8	-102.45	-841.9	1,428.6	330.3	266.2	64.07	5.155	
7,200.0	6,941.1	7,152.7	6,944.5	33.6	32.2	-103.17	-854.6	1,450.3	336.3	271.3	65.01	5.173	
7,300.0	7,036.5	7,252.5	7,041.0	34.2	32.7	-103.86	-867.4	1,472.0	342.4	276.5	65.94	5.193	
7,400.0	7,131.9	7,352.2	7,137.5	34.7	33.2	-104.53	-880.1	1,493.8	348.6	281.7	66.86	5.213	
7,500.0	7,227.3	7,451.9	7,234.0	35.3	33.7	-105.18	-892.8	1,515.5	354.8	287.0	67.77	5.234	
7,600.0	7,322.6	7,551.7	7,330.5	35.9	34.2	-105.80	-905.5	1,537.2	361.0	292.3	68.68	5.256	
7,700.0	7,418.0	7,651.4	7,427.0	36.4	34.7	-106.41	-918.3	1,558.9	367.3	297.7	69.58	5.278	
7,800.0	7,513.4	7,751.1	7,523.5	37.0	35.1	-106.99	-931.0	1,580.6	373.6	303.1	70.48	5.300	
7,900.0	7,608.8	7,850.8	7,620.0	37.5	35.6	-107.56	-943.7	1,602.3	379.9	308.6	71.37	5.323	
8,000.0	7,704.2	7,950.6	7,716.5	38.1	36.1	-108.10	-956.4	1,624.1	386.3	314.1	72.26	5.346	
8,100.0	7,799.6	8,050.3	7,813.0	38.7	36.6	-108.63	-969.2	1,645.8	392.7	319.6	73.14	5.370	
8,200.0	7,895.0	8,150.0	7,909.5	39.2	37.1	-109.14	-981.9	1,667.5	399.2	325.2	74.01	5.394	
8,300.0	7,990.4	8,249.8	8,006.0	39.8	37.5	-109.63	-994.6	1,689.2	405.7	330.8	74.89	5.417	
8,400.0	8,086.2	8,349.5	8,102.6	40.3	38.0	-110.03	-1,007.4	1,710.9	411.7	336.0	75.76	5.435	
8,500.0	8,182.9	8,447.5	8,197.7	40.8	38.5	-110.14	-1,019.3	1,731.3	416.8	340.2	76.60	5.441	
8,600.0	8,280.5	8,545.2	8,293.2	41.2	38.8	-110.23	-1,029.5	1,748.8	421.2	343.8	77.33	5.446	
8,700.0	8,378.7	8,642.8	8,389.4	41.5	39.1	-110.33	-1,038.2	1,763.5	424.9	346.9	77.95	5.451	
8,800.0	8,477.6	8,740.5	8,486.0	41.8	39.4	-110.42	-1,045.1	1,775.4	427.9	349.5	78.46	5.454	
8,900.0	8,576.9	8,838.1	8,583.1	42.0	39.6	-110.51	-1,050.4	1,784.4	430.3	351.5	78.86	5.457	
9,000.0	8,676.5	8,935.7	8,680.4	42.2	39.8	-110.60	-1,054.0	1,790.5	432.0	352.9	79.15	5.458	
9,100.0	8,776.4	9,033.3	8,778.0	42.3	39.9	-110.69	-1,055.9	1,793.8	433.1	353.7	79.34	5.459	
9,200.0	8,876.4	9,132.3	8,876.9	42.4	39.9	140.90	-1,056.3	1,794.4	433.4	353.9	79.45	5.455	
9,300.0	8,976.4	9,233.8	8,978.4	42.4	40.0	140.90	-1,056.5	1,794.1	433.3	353.7	79.58	5.445	
9,400.0	9,076.4	9,335.3	9,079.9	42.5	40.1	140.89	-1,056.9	1,793.3	433.2	353.5	79.70	5.436	
9,500.0	9,176.4	9,436.4	9,181.1	42.5	40.1	140.88	-1,057.5	1,792.2	433.1	353.3	79.81	5.427	
9,535.4	9,211.7	9,471.8	9,216.4	42.6	40.1	140.88	-1,057.8	1,791.8	433.1	353.3	79.85	5.424	
9,600.0	9,276.4	9,536.4	9,281.0	42.6	40.2	140.88	-1,058.2	1,791.0	433.1	353.2	79.93	5.419	
9,700.0	9,376.4	9,636.4	9,381.0	42.7	40.2	140.88	-1,058.9	1,789.8	433.1	353.1	80.05	5.411	
9,800.0	9,476.4	9,736.4	9,481.0	42.7	40.3	140.88	-1,059.6	1,788.6	433.1	353.0	80.17	5.403	
9,900.0	9,576.4	9,836.4	9,581.0	42.8	40.4	140.88	-1,060.3	1,787.4	433.1	352.8	80.29	5.395	
10,000.0	9,676.3	9,936.4	9,681.0	42.9	40.4	140.88	-1,061.0	1,786.2	433.1	352.7	80.42	5.386	
10,100.0	9,776.3	10,036.4	9,781.0	42.9	40.5	140.88	-1,061.7	1,785.0	433.1	352.6	80.54	5.378	

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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design D21 595 Pad - LR06D D21 595 - DD - Plan #2

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,200.0	9,876.3	10,136.4	9,881.0	43.0	40.6	140.88	-1,062.4	1,783.8	433.1	352.5	80.67	5.370	
10,300.0	9,976.3	10,236.4	9,981.0	43.1	40.6	140.88	-1,063.1	1,782.6	433.1	352.4	80.79	5.361	
10,400.0	10,076.3	10,336.4	10,081.0	43.1	40.7	140.88	-1,063.8	1,781.4	433.1	352.2	80.92	5.353	
10,500.0	10,176.3	10,436.4	10,181.0	43.2	40.8	140.88	-1,064.5	1,780.2	433.1	352.1	81.05	5.344	
10,600.0	10,276.3	10,536.4	10,280.9	43.3	40.8	140.88	-1,065.1	1,779.0	433.1	352.0	81.18	5.335	
10,700.0	10,376.3	10,636.4	10,380.9	43.3	40.9	140.88	-1,065.8	1,777.8	433.1	351.8	81.31	5.327	
10,800.0	10,476.3	10,736.4	10,480.9	43.4	41.0	140.88	-1,066.5	1,776.6	433.1	351.7	81.45	5.318	
10,900.0	10,576.3	10,836.4	10,580.9	43.5	41.0	140.88	-1,067.2	1,775.4	433.1	351.6	81.58	5.309	
11,000.0	10,676.2	10,936.4	10,680.9	43.5	41.1	140.88	-1,067.9	1,774.2	433.1	351.4	81.72	5.300	
11,100.0	10,776.2	11,036.4	10,780.9	43.6	41.2	140.88	-1,068.6	1,773.0	433.1	351.3	81.86	5.291	
11,200.0	10,876.2	11,136.4	10,880.9	43.7	41.3	140.88	-1,069.3	1,771.8	433.1	351.2	82.00	5.283	
11,300.0	10,976.2	11,236.4	10,980.9	43.7	41.3	140.89	-1,070.0	1,770.6	433.2	351.0	82.14	5.274	
11,400.0	11,076.2	11,336.4	11,080.9	43.8	41.4	140.89	-1,070.7	1,769.4	433.2	350.9	82.28	5.264	
11,500.0	11,176.2	11,436.4	11,180.9	43.9	41.5	140.89	-1,071.4	1,768.2	433.2	350.7	82.42	5.255	
11,600.0	11,276.2	11,536.4	11,280.9	44.0	41.5	140.89	-1,072.1	1,767.0	433.2	350.6	82.56	5.246	
11,700.0	11,376.2	11,636.4	11,380.8	44.0	41.6	140.89	-1,072.8	1,765.8	433.2	350.4	82.71	5.237	
11,800.0	11,476.2	11,736.4	11,480.8	44.1	41.7	140.89	-1,073.5	1,764.6	433.2	350.3	82.86	5.228	
11,900.0	11,576.2	11,836.4	11,580.8	44.2	41.8	140.89	-1,074.1	1,763.4	433.2	350.2	83.00	5.218	
12,000.0	11,676.2	11,936.4	11,680.8	44.3	41.8	140.89	-1,074.8	1,762.2	433.2	350.0	83.15	5.209	
12,100.0	11,776.1	12,036.4	11,780.8	44.3	41.9	140.89	-1,075.5	1,761.0	433.2	349.9	83.30	5.200	
12,200.0	11,876.1	12,136.4	11,880.8	44.4	42.0	140.89	-1,076.2	1,759.8	433.2	349.7	83.45	5.190	
12,229.9	11,906.0	12,146.6	11,891.0	44.4	42.0	140.89	-1,076.3	1,759.7	433.6	350.1	83.48	5.194	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well LR06C D21 595
Project:	Garfield County	**TVD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Reference Site:	D21 595 Pad	**MD Reference:**	KBE @ 8278.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	LR06C D21 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 #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KBE @ 8278.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °
Coordinates are relative to: LR06C D21 595
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.62°