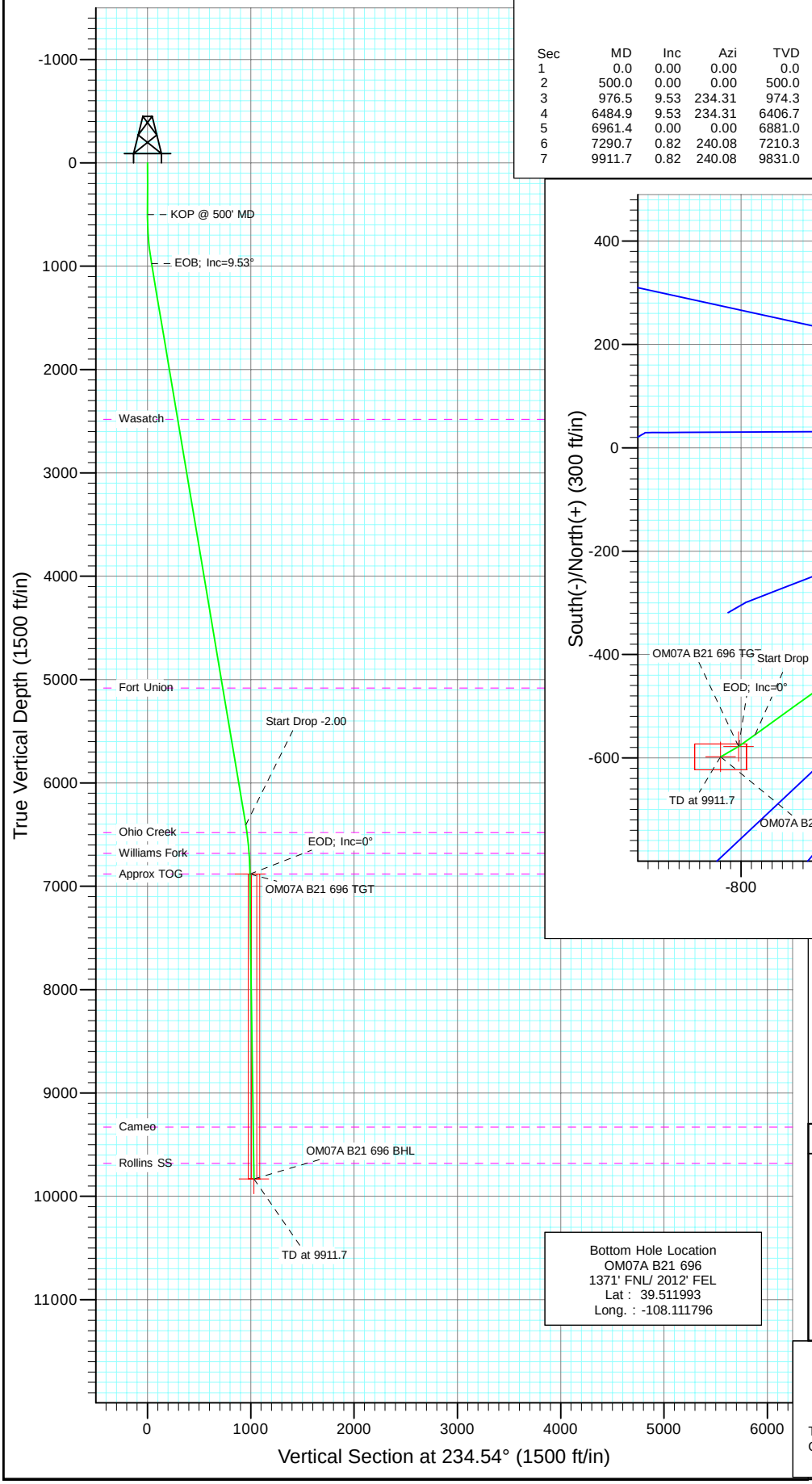
Berry Petroleum Company

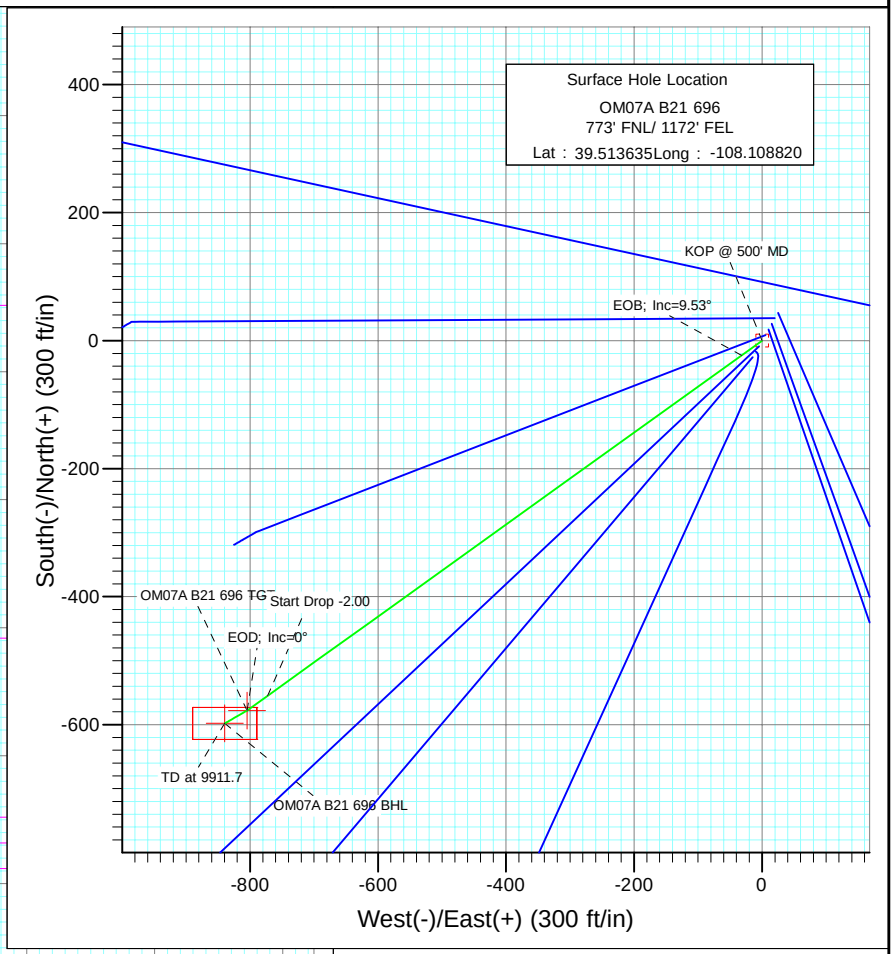
Project: Garfield County
Site: NENE S21-T6S-R96W (B21 696 Pad)
Well: OM07A B21 696
Wellbore: DD
Design: Plan #1

CATHEDRAL

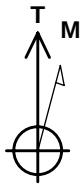
SECTION DETAILS

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	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	976.5	9.53	234.31	974.3	-23.1	-32.1	2.00	234.31	39.5	
4	6484.9	9.53	234.31	6406.7	-555.0	-772.8	0.00	0.00	951.5	
5	6961.4	0.00	0.00	6881.0	-578.1	-804.9	2.00	180.00	991.0	OM07A B21 696 TGT
6	7290.7	0.82	240.08	7210.3	-579.3	-807.0	0.25	240.08	993.4	
7	9911.7	0.82	240.08	9831.0	-598.1	-839.6	0.00	0.00	1030.9	OM07A B21 696 BHL





Bottom Hole Location
OM07A B21 696
1371' FNL/ 2012' FEL
Lat : 39.511993
Long. : -108.111796



Azimuths to True North
Magnetic North: 10.45°

Magnetic Field
Strength: 52312.4snT
Dip Angle: 65.76°
Date: 11/30/2010
Model: IGRF200510

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2481.0	2504.3	Wasatch
5081.0	5140.7	Fort Union
6481.0	6560.1	Ohio Creek
6681.0	6761.2	Williams Fork
6881.0	6961.4	Approx TOG
9331.0	9411.6	Cameo
9681.0	9761.7	Rollins SS

DESIGN DETAILS: Plan #1

1055XX; BH
KBE @ 8293.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From TVD
OM07A B21 696 BHL	234.54	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 OM07A B21 696
Company:	Berry Petroleum Company (NAD 83)	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Project:	Garfield County	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site:	NENE S21-T6S-R96W (B21 696 Pad)	**North Reference:**	True
Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project Garfield County

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site NENE S21-T6S-R96W (B21 696 Pad)

Site Position:		**Northing:**	1,622,587.75 ft	**Latitude:**	39.513778
From:	Lat/Long	**Easting:**	2,264,263.59 ft	**Longitude:**	-108.108174
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	-1.64 °

Well OM07A B21 696

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,622,540.91 ft	**Latitude:**	39.513635
	+E/-W	0.0 ft	**Easting:**	2,264,079.91 ft	**Longitude:**	-108.108820
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	8,278.0 ft

Wellbore DD

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/30/2010	10.45	65.76	52,312

Design Plan #1

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	234.54

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
976.5	9.53	234.31	974.3	-23.1	-32.1	2.00	2.00	0.00	234.31	
6,484.9	9.53	234.31	6,406.7	-555.0	-772.8	0.00	0.00	0.00	0.00	
6,961.4	0.00	0.00	6,881.0	-578.1	-804.9	2.00	-2.00	0.00	180.00	OM07A B21 696 TGT
7,290.7	0.82	240.08	7,210.3	-579.3	-807.0	0.25	0.25	-36.42	240.08	
9,911.7	0.82	240.08	9,831.0	-598.1	-839.6	0.00	0.00	0.00	0.00	OM07A B21 696 BHL

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM07A B21 696
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Project:	Garfield County	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site:	NENE S21-T6S-R96W (B21 696 Pad)	**North Reference:**	True
Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	0.0	0.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	0.0	0.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	0.0	0.0	0.0	0.00	0.00	
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	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500' MD
510.0	0.20	234.31	510.0	0.0	0.0	0.0	2.00	2.00	
540.0	0.80	234.31	540.0	-0.2	-0.2	0.3	2.00	2.00	
570.0	1.40	234.31	570.0	-0.5	-0.7	0.9	2.00	2.00	
600.0	2.00	234.31	600.0	-1.0	-1.4	1.7	2.00	2.00	
630.0	2.60	234.31	630.0	-1.7	-2.4	2.9	2.00	2.00	
660.0	3.20	234.31	659.9	-2.6	-3.6	4.5	2.00	2.00	
690.0	3.80	234.31	689.9	-3.7	-5.1	6.3	2.00	2.00	
720.0	4.40	234.31	719.8	-4.9	-6.9	8.4	2.00	2.00	
750.0	5.00	234.31	749.7	-6.4	-8.9	10.9	2.00	2.00	
780.0	5.60	234.31	779.6	-8.0	-11.1	13.7	2.00	2.00	
810.0	6.20	234.31	809.4	-9.8	-13.6	16.8	2.00	2.00	
840.0	6.80	234.31	839.2	-11.8	-16.4	20.2	2.00	2.00	
870.0	7.40	234.31	869.0	-13.9	-19.4	23.9	2.00	2.00	
900.0	8.00	234.31	898.7	-16.3	-22.6	27.9	2.00	2.00	
930.0	8.60	234.31	928.4	-18.8	-26.2	32.2	2.00	2.00	
960.0	9.20	234.31	958.0	-21.5	-29.9	36.9	2.00	2.00	
976.5	9.53	234.31	974.3	-23.1	-32.1	39.5	2.00	2.00	EOB; Inc=9.53°
990.0	9.53	234.31	987.6	-24.4	-33.9	41.8	0.00	0.00	
1,020.0	9.53	234.31	1,017.2	-27.3	-38.0	46.7	0.00	0.00	
1,050.0	9.53	234.31	1,046.8	-30.2	-42.0	51.7	0.00	0.00	
1,080.0	9.53	234.31	1,076.4	-33.1	-46.0	56.7	0.00	0.00	
1,110.0	9.53	234.31	1,106.0	-36.0	-50.1	61.6	0.00	0.00	
1,140.0	9.53	234.31	1,135.5	-38.9	-54.1	66.6	0.00	0.00	
1,170.0	9.53	234.31	1,165.1	-41.8	-58.1	71.6	0.00	0.00	
1,200.0	9.53	234.31	1,194.7	-44.6	-62.2	76.5	0.00	0.00	
1,230.0	9.53	234.31	1,224.3	-47.5	-66.2	81.5	0.00	0.00	
1,260.0	9.53	234.31	1,253.9	-50.4	-70.2	86.5	0.00	0.00	
1,290.0	9.53	234.31	1,283.5	-53.3	-74.3	91.4	0.00	0.00	
1,320.0	9.53	234.31	1,313.1	-56.2	-78.3	96.4	0.00	0.00	
1,350.0	9.53	234.31	1,342.7	-59.1	-82.3	101.4	0.00	0.00	
1,380.0	9.53	234.31	1,372.2	-62.0	-86.4	106.3	0.00	0.00	
1,410.0	9.53	234.31	1,401.8	-64.9	-90.4	111.3	0.00	0.00	
1,440.0	9.53	234.31	1,431.4	-67.8	-94.4	116.3	0.00	0.00	
1,470.0	9.53	234.31	1,461.0	-70.7	-98.5	121.2	0.00	0.00	

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Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
1,500.0	9.53	234.31	1,490.6	-73.6	-102.5	126.2	0.00	0.00	
1,530.0	9.53	234.31	1,520.2	-76.5	-106.5	131.2	0.00	0.00	
1,560.0	9.53	234.31	1,549.8	-79.4	-110.6	136.1	0.00	0.00	
1,590.0	9.53	234.31	1,579.3	-82.3	-114.6	141.1	0.00	0.00	
1,620.0	9.53	234.31	1,608.9	-85.2	-118.6	146.1	0.00	0.00	
1,650.0	9.53	234.31	1,638.5	-88.1	-122.7	151.0	0.00	0.00	
1,680.0	9.53	234.31	1,668.1	-91.0	-126.7	156.0	0.00	0.00	
1,710.0	9.53	234.31	1,697.7	-93.9	-130.7	161.0	0.00	0.00	
1,740.0	9.53	234.31	1,727.3	-96.8	-134.8	165.9	0.00	0.00	
1,770.0	9.53	234.31	1,756.9	-99.7	-138.8	170.9	0.00	0.00	
1,800.0	9.53	234.31	1,786.4	-102.6	-142.9	175.9	0.00	0.00	
1,830.0	9.53	234.31	1,816.0	-105.5	-146.9	180.8	0.00	0.00	
1,860.0	9.53	234.31	1,845.6	-108.4	-150.9	185.8	0.00	0.00	
1,890.0	9.53	234.31	1,875.2	-111.3	-155.0	190.8	0.00	0.00	
1,920.0	9.53	234.31	1,904.8	-114.2	-159.0	195.7	0.00	0.00	
1,950.0	9.53	234.31	1,934.4	-117.1	-163.0	200.7	0.00	0.00	
1,980.0	9.53	234.31	1,964.0	-120.0	-167.1	205.7	0.00	0.00	
2,010.0	9.53	234.31	1,993.5	-122.9	-171.1	210.6	0.00	0.00	
2,040.0	9.53	234.31	2,023.1	-125.8	-175.1	215.6	0.00	0.00	
2,070.0	9.53	234.31	2,052.7	-128.7	-179.2	220.6	0.00	0.00	
2,100.0	9.53	234.31	2,082.3	-131.6	-183.2	225.5	0.00	0.00	
2,130.0	9.53	234.31	2,111.9	-134.5	-187.2	230.5	0.00	0.00	
2,160.0	9.53	234.31	2,141.5	-137.4	-191.3	235.5	0.00	0.00	
2,190.0	9.53	234.31	2,171.1	-140.3	-195.3	240.4	0.00	0.00	
2,220.0	9.53	234.31	2,200.6	-143.2	-199.3	245.4	0.00	0.00	
2,250.0	9.53	234.31	2,230.2	-146.1	-203.4	250.4	0.00	0.00	
2,280.0	9.53	234.31	2,259.8	-148.9	-207.4	255.3	0.00	0.00	
2,310.0	9.53	234.31	2,289.4	-151.8	-211.4	260.3	0.00	0.00	
2,340.0	9.53	234.31	2,319.0	-154.7	-215.5	265.3	0.00	0.00	
2,370.0	9.53	234.31	2,348.6	-157.6	-219.5	270.2	0.00	0.00	
2,400.0	9.53	234.31	2,378.2	-160.5	-223.5	275.2	0.00	0.00	
2,430.0	9.53	234.31	2,407.7	-163.4	-227.6	280.2	0.00	0.00	
2,460.0	9.53	234.31	2,437.3	-166.3	-231.6	285.1	0.00	0.00	
2,490.0	9.53	234.31	2,466.9	-169.2	-235.6	290.1	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
OM07A B21 696 BHL	0.00	0.00	9,831.0	-598.1	-839.6	1,621,967.20	2,263,223.45	39.511993	-108.111796
- plan misses target center by 7401.2ft at 2490.0ft MD (2466.9 TVD, -169.2 N, -235.6 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
OM07A B21 696 TGT	0.00	0.00	6,881.0	-578.1	-804.9	1,621,986.16	2,263,258.70	39.512048	-108.111673
- plan misses target center by 4469.4ft at 2490.0ft MD (2466.9 TVD, -169.2 N, -235.6 E)									
- Point									

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Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
2,500.0	9.53	234.31	2,476.8	-170.2	-237.0	291.8	0.00	0.00	
2,504.3	9.53	234.31	2,481.0	-170.6	-237.6	292.5	0.00	0.00	Wasatch
2,600.0	9.53	234.31	2,575.4	-179.9	-250.4	308.3	0.00	0.00	
2,700.0	9.53	234.31	2,674.0	-189.5	-263.9	324.9	0.00	0.00	
2,800.0	9.53	234.31	2,772.6	-199.2	-277.3	341.4	0.00	0.00	
2,900.0	9.53	234.31	2,871.3	-208.8	-290.8	358.0	0.00	0.00	
3,000.0	9.53	234.31	2,969.9	-218.5	-304.2	374.5	0.00	0.00	
3,100.0	9.53	234.31	3,068.5	-228.1	-317.7	391.1	0.00	0.00	
3,200.0	9.53	234.31	3,167.1	-237.8	-331.1	407.7	0.00	0.00	
3,300.0	9.53	234.31	3,265.7	-247.5	-344.6	424.2	0.00	0.00	
3,400.0	9.53	234.31	3,364.4	-257.1	-358.0	440.8	0.00	0.00	
3,500.0	9.53	234.31	3,463.0	-266.8	-371.5	457.3	0.00	0.00	
3,600.0	9.53	234.31	3,561.6	-276.4	-384.9	473.9	0.00	0.00	
3,700.0	9.53	234.31	3,660.2	-286.1	-398.3	490.4	0.00	0.00	
3,800.0	9.53	234.31	3,758.8	-295.7	-411.8	507.0	0.00	0.00	
3,900.0	9.53	234.31	3,857.5	-305.4	-425.2	523.5	0.00	0.00	
4,000.0	9.53	234.31	3,956.1	-315.1	-438.7	540.1	0.00	0.00	
4,100.0	9.53	234.31	4,054.7	-324.7	-452.1	556.7	0.00	0.00	
4,200.0	9.53	234.31	4,153.3	-334.4	-465.6	573.2	0.00	0.00	
4,300.0	9.53	234.31	4,251.9	-344.0	-479.0	589.8	0.00	0.00	
4,400.0	9.53	234.31	4,350.6	-353.7	-492.5	606.3	0.00	0.00	
4,500.0	9.53	234.31	4,449.2	-363.3	-505.9	622.9	0.00	0.00	
4,600.0	9.53	234.31	4,547.8	-373.0	-519.4	639.4	0.00	0.00	
4,700.0	9.53	234.31	4,646.4	-382.7	-532.8	656.0	0.00	0.00	
4,800.0	9.53	234.31	4,745.0	-392.3	-546.3	672.5	0.00	0.00	
4,900.0	9.53	234.31	4,843.7	-402.0	-559.7	689.1	0.00	0.00	
5,000.0	9.53	234.31	4,942.3	-411.6	-573.2	705.7	0.00	0.00	
5,100.0	9.53	234.31	5,040.9	-421.3	-586.6	722.2	0.00	0.00	
5,140.7	9.53	234.31	5,081.0	-425.2	-592.1	728.9	0.00	0.00	Fort Union
5,200.0	9.53	234.31	5,139.5	-430.9	-600.1	738.8	0.00	0.00	
5,300.0	9.53	234.31	5,238.1	-440.6	-613.5	755.3	0.00	0.00	
5,400.0	9.53	234.31	5,336.8	-450.3	-626.9	771.9	0.00	0.00	
5,500.0	9.53	234.31	5,435.4	-459.9	-640.4	788.4	0.00	0.00	
5,600.0	9.53	234.31	5,534.0	-469.6	-653.8	805.0	0.00	0.00	
5,700.0	9.53	234.31	5,632.6	-479.2	-667.3	821.5	0.00	0.00	
5,800.0	9.53	234.31	5,731.2	-488.9	-680.7	838.1	0.00	0.00	
5,900.0	9.53	234.31	5,829.9	-498.5	-694.2	854.7	0.00	0.00	
6,000.0	9.53	234.31	5,928.5	-508.2	-707.6	871.2	0.00	0.00	
6,100.0	9.53	234.31	6,027.1	-517.9	-721.1	887.8	0.00	0.00	
6,200.0	9.53	234.31	6,125.7	-527.5	-734.5	904.3	0.00	0.00	
6,300.0	9.53	234.31	6,224.3	-537.2	-748.0	920.9	0.00	0.00	
6,400.0	9.53	234.31	6,323.0	-546.8	-761.4	937.4	0.00	0.00	
6,484.9	9.53	234.31	6,406.7	-555.0	-772.8	951.5	0.00	0.00	Start Drop -2.00
6,500.0	9.23	234.31	6,421.6	-556.5	-774.8	953.9	2.00	-2.00	
6,560.1	8.03	234.31	6,481.0	-561.7	-782.2	963.0	2.00	-2.00	Ohio Creek
6,600.0	7.23	234.31	6,520.6	-564.8	-786.5	968.3	2.00	-2.00	
6,700.0	5.23	234.31	6,620.0	-571.1	-795.3	979.1	2.00	-2.00	
6,761.2	4.00	234.31	6,681.0	-574.0	-799.3	984.0	2.00	-2.00	Williams Fork
6,800.0	3.23	234.31	6,719.7	-575.4	-801.3	986.5	2.00	-2.00	
6,900.0	1.23	234.31	6,819.6	-577.7	-804.4	990.4	2.00	-2.00	
6,961.4	0.00	0.00	6,881.0	-578.1	-804.9	991.0	2.00	-2.00	EOD; Inc=0° - Approx TOG - OM07A B21 696 T
7,000.0	0.10	240.08	6,919.6	-578.1	-805.0	991.1	0.25	0.25	

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM07A B21 696
Company:	Berry Petroleum Company (NAD 83)	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Project:	Garfield County	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site:	NENE S21-T6S-R96W (B21 696 Pad)	**North Reference:**	True
Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
7,100.0	0.35	240.08	7,019.6	-578.3	-805.3	991.4	0.25	0.25	
7,200.0	0.60	240.08	7,119.6	-578.7	-806.0	992.3	0.25	0.25	
7,290.7	0.82	240.08	7,210.3	-579.3	-807.0	993.4	0.25	0.25	
7,300.0	0.82	240.08	7,219.6	-579.3	-807.1	993.5	0.00	0.00	
7,400.0	0.82	240.08	7,319.6	-580.1	-808.4	994.9	0.00	0.00	
7,500.0	0.82	240.08	7,419.6	-580.8	-809.6	996.4	0.00	0.00	
7,600.0	0.82	240.08	7,519.6	-581.5	-810.9	997.8	0.00	0.00	
7,700.0	0.82	240.08	7,619.5	-582.2	-812.1	999.2	0.00	0.00	
7,800.0	0.82	240.08	7,719.5	-582.9	-813.3	1,000.7	0.00	0.00	
7,900.0	0.82	240.08	7,819.5	-583.6	-814.6	1,002.1	0.00	0.00	
8,000.0	0.82	240.08	7,919.5	-584.4	-815.8	1,003.5	0.00	0.00	
8,100.0	0.82	240.08	8,019.5	-585.1	-817.1	1,005.0	0.00	0.00	
8,200.0	0.82	240.08	8,119.5	-585.8	-818.3	1,006.4	0.00	0.00	
8,300.0	0.82	240.08	8,219.5	-586.5	-819.6	1,007.8	0.00	0.00	
8,400.0	0.82	240.08	8,319.5	-587.2	-820.8	1,009.2	0.00	0.00	
8,500.0	0.82	240.08	8,419.5	-587.9	-822.1	1,010.7	0.00	0.00	
8,600.0	0.82	240.08	8,519.5	-588.7	-823.3	1,012.1	0.00	0.00	
8,700.0	0.82	240.08	8,619.4	-589.4	-824.6	1,013.5	0.00	0.00	
8,800.0	0.82	240.08	8,719.4	-590.1	-825.8	1,015.0	0.00	0.00	
8,900.0	0.82	240.08	8,819.4	-590.8	-827.0	1,016.4	0.00	0.00	
9,000.0	0.82	240.08	8,919.4	-591.5	-828.3	1,017.8	0.00	0.00	
9,100.0	0.82	240.08	9,019.4	-592.2	-829.5	1,019.3	0.00	0.00	
9,200.0	0.82	240.08	9,119.4	-593.0	-830.8	1,020.7	0.00	0.00	
9,300.0	0.82	240.08	9,219.4	-593.7	-832.0	1,022.1	0.00	0.00	
9,400.0	0.82	240.08	9,319.4	-594.4	-833.3	1,023.5	0.00	0.00	
9,411.6	0.82	240.08	9,331.0	-594.5	-833.4	1,023.7	0.00	0.00	Cameo
9,500.0	0.82	240.08	9,419.4	-595.1	-834.5	1,025.0	0.00	0.00	
9,600.0	0.82	240.08	9,519.3	-595.8	-835.8	1,026.4	0.00	0.00	
9,700.0	0.82	240.08	9,619.3	-596.5	-837.0	1,027.8	0.00	0.00	
9,761.7	0.82	240.08	9,681.0	-597.0	-837.8	1,028.7	0.00	0.00	Rollins SS
9,800.0	0.82	240.08	9,719.3	-597.3	-838.2	1,029.3	0.00	0.00	
9,900.0	0.82	240.08	9,819.3	-598.0	-839.5	1,030.7	0.00	0.00	
9,911.7	0.82	240.08	9,831.0	-598.1	-839.6	1,030.9	0.00	0.00	OM07A B21 696 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
OM07A B21 696 BHL - plan hits target center - Rectangle (sides W50.0 H100.0 D0.0)	0.00	0.00	9,831.0	-598.1	-839.6	1,621,967.20	2,263,223.45	39.511993	-108.111796
OM07A B21 696 TGT - plan hits target center - Point	0.00	0.00	6,881.0	-578.1	-804.9	1,621,986.16	2,263,258.70	39.512048	-108.111673

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM07A B21 696
Company:	Berry Petroleum Company (NAD 83)	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Project:	Garfield County	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site:	NENE S21-T6S-R96W (B21 696 Pad)	**North Reference:**	True
Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,504.3	2,481.0	Wasatch		0.00	
5,140.7	5,081.0	Fort Union		0.00	
6,560.1	6,481.0	Ohio Creek		0.00	
6,761.2	6,681.0	Williams Fork		0.00	
6,961.4	6,881.0	Approx TOG		0.00	
9,411.6	9,331.0	Cameo		0.00	
9,761.7	9,681.0	Rollins SS		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
500.0	500.0	0.0	0.0	KOP @ 500' MD
976.5	974.3	-23.1	-32.1	EOB; Inc=9.53°
6,484.9	6,406.7	-555.0	-772.8	Start Drop -2.00
6,961.4	6,881.0	-578.1	-804.9	EOD; Inc=0°
9,911.7	9,831.0	-598.1	-839.6	TD at 9911.7

Berry Petroleum Company (NAD 83)

Garfield County
NENE S21-T6S-R96W (B21 696 Pad)
OM07A B21 696
DD
Plan #1

Anticollision Report

01 December, 2010

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Plan #1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	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** 12/1/2010

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	9,911.7	Plan #1 (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
NENE S21-T6S-R96W (B21 696 Pad)						
OM02B B21 696 - DD - Plan #1	896.9	923.1	148.4	144.9	41.538	CC
OM02B B21 696 - DD - Plan #1	900.0	926.2	148.4	144.8	41.343	ES
OM02B B21 696 - DD - Plan #1	9,911.7	9,963.8	942.6	891.2	18.353	SF
OM02C B21 696 - DD - Plan #1	524.2	525.1	35.0	33.1	18.609	CC, ES
OM02C B21 696 - DD - Plan #1	9,911.7	9,911.9	633.7	584.6	12.907	SF
OM02D B21 696 - DD - Plan #1	500.0	500.0	10.1	8.4	5.972	CC
OM02D B21 696 - DD - Plan #1	600.0	600.3	10.3	8.3	5.063	ES
OM02D B21 696 - DD - Plan #1	800.0	800.8	12.6	9.8	4.524	SF
OM07B B21 696 - DD - Plan #1	400.0	400.0	10.0	8.6	7.420	CC, ES
OM07B B21 696 - DD - Plan #1	500.0	499.6	11.6	9.9	6.869	SF
OM07C B21 696 - DD - Plan #1	300.0	300.0	29.7	28.7	29.891	CC, ES
OM07C B21 696 - DD - Plan #1	9,911.7	9,998.7	656.5	615.8	16.134	SF
OM07D B21 696 - DD - Plan #1	200.0	200.0	20.1	19.4	31.094	CC
OM07D B21 696 - DD - Plan #1	300.0	299.9	20.3	19.3	20.417	ES
OM07D B21 696 - DD - Plan #1	400.0	399.1	22.9	21.6	17.053	SF
OM08B B21 696 - DD - Plan #1	500.0	500.0	20.1	18.4	11.860	CC, ES
OM08B B21 696 - DD - Plan #1	600.0	600.0	21.7	19.6	10.617	SF
OM08C B21 696 - DD - Plan #1	574.3	575.3	24.8	22.8	12.380	CC, ES
OM08C B21 696 - DD - Plan #1	600.0	601.0	25.0	22.9	11.873	SF
OM08D B21 696 - DD - Plan #1	562.6	564.4	41.2	39.1	20.143	CC, ES
OM08D B21 696 - DD - Plan #1	700.0	700.3	48.3	45.6	18.013	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM02B B21 696 - DD - Plan #1

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	74.05	52.1	182.3	189.6				
100.0	100.0	100.0	100.0	0.1	0.1	74.05	52.1	182.3	189.6	189.3	0.30	638.861	
200.0	200.0	200.0	200.0	0.3	0.3	74.05	52.1	182.3	189.6	188.9	0.65	293.531	
300.0	300.0	306.1	306.1	0.5	0.5	73.77	52.5	180.3	187.9	186.9	1.01	185.986	
400.0	400.0	412.0	411.8	0.7	0.7	72.89	53.8	174.6	183.1	181.7	1.39	131.232	
500.0	500.0	517.3	516.6	0.8	1.0	71.32	55.8	165.1	175.1	173.3	1.81	96.503	
600.0	600.0	621.8	620.3	1.0	1.3	-165.64	58.7	152.0	165.8	163.7	2.15	77.314	
700.0	699.8	725.7	722.8	1.2	1.6	-169.63	62.3	135.3	157.5	154.9	2.58	61.026	
800.0	799.5	827.4	822.4	1.4	2.0	-174.93	66.6	115.6	150.8	147.7	3.07	49.171	
896.9	895.6	923.1	916.1	1.7	2.4	179.49	70.8	96.3	148.4	144.9	3.57	41.538	CC
900.0	898.7	926.2	919.1	1.7	2.4	179.30	71.0	95.7	148.4	144.8	3.59	41.343	ES
1,000.0	997.5	1,025.0	1,015.8	1.9	2.7	173.56	75.3	75.8	151.0	146.9	4.15	36.352	
1,100.0	1,096.1	1,123.8	1,112.5	2.2	3.1	168.14	79.6	56.0	156.1	151.3	4.76	32.775	
1,200.0	1,194.7	1,222.6	1,209.2	2.5	3.5	163.09	83.9	36.1	162.5	157.1	5.40	30.086	
1,300.0	1,293.3	1,321.4	1,305.8	2.9	3.9	158.45	88.3	16.2	170.1	164.0	6.06	28.044	
1,400.0	1,392.0	1,420.2	1,402.5	3.2	4.3	154.23	92.6	-3.7	178.7	171.9	6.75	26.480	
1,500.0	1,490.6	1,519.0	1,499.2	3.5	4.7	150.41	96.9	-23.5	188.2	180.7	7.44	25.275	
1,600.0	1,589.2	1,617.7	1,595.8	3.8	5.1	146.96	101.3	-43.4	198.4	190.3	8.15	24.341	
1,700.0	1,687.8	1,716.5	1,692.5	4.2	5.5	143.85	105.6	-63.3	209.3	200.4	8.86	23.613	
1,800.0	1,786.4	1,815.3	1,789.2	4.5	5.9	141.06	109.9	-83.2	220.8	211.2	9.58	23.045	
1,900.0	1,885.1	1,914.1	1,885.9	4.8	6.3	138.55	114.3	-103.0	232.7	222.4	10.30	22.599	
2,000.0	1,983.7	2,012.9	1,982.5	5.2	6.7	136.28	118.6	-122.9	245.0	234.0	11.01	22.249	
2,100.0	2,082.3	2,111.7	2,079.2	5.5	7.1	134.23	122.9	-142.8	257.7	246.0	11.73	21.973	
2,200.0	2,180.9	2,210.5	2,175.9	5.8	7.5	132.37	127.3	-162.6	270.7	258.2	12.44	21.757	
2,300.0	2,279.5	2,309.3	2,272.6	6.2	7.9	130.69	131.6	-182.5	283.9	270.7	13.15	21.587	
2,400.0	2,378.2	2,408.1	2,369.2	6.5	8.3	129.15	135.9	-202.4	297.3	283.5	13.86	21.455	
2,500.0	2,476.8	2,506.8	2,465.9	6.8	8.7	127.75	140.3	-222.3	311.0	296.4	14.56	21.352	
2,600.0	2,575.4	2,605.6	2,562.6	7.2	9.1	126.46	144.6	-242.1	324.8	309.5	15.27	21.273	
2,700.0	2,674.0	2,704.4	2,659.2	7.5	9.5	125.28	148.9	-262.0	338.8	322.8	15.97	21.214	
2,800.0	2,772.6	2,803.2	2,755.9	7.8	9.9	124.20	153.2	-281.9	352.8	336.2	16.67	21.170	
2,900.0	2,871.3	2,902.0	2,852.6	8.2	10.3	123.19	157.6	-301.8	367.0	349.7	17.36	21.138	
3,000.0	2,969.9	3,000.8	2,949.3	8.5	10.7	122.27	161.9	-321.6	381.3	363.3	18.06	21.117	
3,100.0	3,068.5	3,099.6	3,045.9	8.9	11.1	121.40	166.2	-341.5	395.7	377.0	18.75	21.105	
3,200.0	3,167.1	3,198.4	3,142.6	9.2	11.5	120.60	170.6	-361.4	410.2	390.8	19.44	21.099	
3,300.0	3,265.7	3,297.2	3,239.3	9.5	11.9	119.86	174.9	-381.2	424.8	404.6	20.13	21.099	
3,400.0	3,364.4	3,395.9	3,336.0	9.9	12.3	119.16	179.2	-401.1	439.4	418.6	20.82	21.104	
3,500.0	3,463.0	3,494.7	3,432.6	10.2	12.7	118.51	183.6	-421.0	454.1	432.6	21.51	21.112	
3,600.0	3,561.6	3,593.5	3,529.3	10.5	13.1	117.90	187.9	-440.9	468.8	446.6	22.19	21.123	
3,700.0	3,660.2	3,692.3	3,626.0	10.9	13.5	117.32	192.2	-460.7	483.6	460.7	22.88	21.137	
3,800.0	3,758.8	3,791.1	3,722.6	11.2	13.9	116.78	196.6	-480.6	498.4	474.8	23.56	21.153	
3,900.0	3,857.5	3,889.9	3,819.3	11.6	14.3	116.27	200.9	-500.5	513.3	489.0	24.24	21.170	
4,000.0	3,956.1	3,988.7	3,916.0	11.9	14.7	115.79	205.2	-520.4	528.2	503.2	24.93	21.189	
4,100.0	4,054.7	4,087.5	4,012.7	12.2	15.1	115.34	209.5	-540.2	543.1	517.5	25.61	21.208	
4,200.0	4,153.3	4,186.3	4,109.3	12.6	15.5	114.91	213.9	-560.1	558.1	531.8	26.29	21.229	
4,300.0	4,251.9	4,285.0	4,206.0	12.9	15.9	114.50	218.2	-580.0	573.1	546.1	26.97	21.250	
4,400.0	4,350.6	4,383.8	4,302.7	13.2	16.3	114.12	222.5	-599.8	588.1	560.4	27.65	21.271	
4,500.0	4,449.2	4,482.6	4,399.3	13.6	16.7	113.75	226.9	-619.7	603.1	574.8	28.33	21.293	
4,600.0	4,547.8	4,581.4	4,496.0	13.9	17.1	113.40	231.2	-639.6	618.2	589.2	29.00	21.315	
4,700.0	4,646.4	4,680.2	4,592.7	14.3	17.5	113.07	235.5	-659.5	633.3	603.6	29.68	21.337	
4,800.0	4,745.0	4,779.0	4,689.4	14.6	17.9	112.75	239.9	-679.3	648.4	618.1	30.36	21.359	
4,900.0	4,843.7	4,877.8	4,786.0	14.9	18.3	112.45	244.2	-699.2	663.6	632.5	31.04	21.381	
5,000.0	4,942.3	4,976.6	4,882.7	15.3	18.7	112.16	248.5	-719.1	678.7	647.0	31.71	21.403	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM02B B21 696 - DD - Plan #1

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	5,040.9	5,075.4	4,979.4	15.6	19.1	111.88	252.9	-739.0	693.9	661.5	32.39	21.424	
5,200.0	5,139.5	5,174.1	5,076.1	16.0	19.5	111.62	257.2	-758.8	709.1	676.0	33.06	21.446	
5,300.0	5,238.1	5,272.9	5,172.7	16.3	19.9	111.36	261.5	-778.7	724.3	690.5	33.74	21.467	
5,400.0	5,336.8	5,371.7	5,269.4	16.6	20.3	111.12	265.8	-798.6	739.5	705.1	34.41	21.488	
5,500.0	5,435.4	5,470.5	5,366.1	17.0	20.7	110.89	270.2	-818.4	754.7	719.6	35.09	21.509	
5,600.0	5,534.0	5,569.3	5,462.7	17.3	21.1	110.66	274.5	-838.3	769.9	734.2	35.76	21.529	
5,700.0	5,632.6	5,668.1	5,559.4	17.7	21.5	110.45	278.8	-858.2	785.2	748.7	36.44	21.549	
5,800.0	5,731.2	5,766.9	5,656.1	18.0	21.9	110.24	283.2	-878.1	800.4	763.3	37.11	21.569	
5,900.0	5,829.9	5,865.7	5,752.8	18.3	22.3	110.04	287.5	-897.9	815.7	777.9	37.78	21.589	
6,000.0	5,928.5	5,964.5	5,849.4	18.7	22.7	109.85	291.8	-917.8	831.0	792.5	38.46	21.608	
6,100.0	6,027.1	6,063.2	5,946.1	19.0	23.1	109.66	296.2	-937.7	846.2	807.1	39.13	21.627	
6,200.0	6,125.7	6,162.0	6,042.8	19.4	23.5	109.48	300.5	-957.6	861.5	821.7	39.80	21.645	
6,300.0	6,224.3	6,260.8	6,139.5	19.7	23.9	109.31	304.8	-977.4	876.8	836.4	40.47	21.664	
6,400.0	6,323.0	6,359.6	6,236.1	20.0	24.3	109.14	309.2	-997.3	892.1	851.0	41.15	21.682	
6,500.0	6,421.6	6,462.3	6,336.7	20.4	24.7	109.02	313.6	-1,017.8	907.4	865.6	41.83	21.691	
6,600.0	6,520.6	6,579.2	6,451.7	20.6	25.1	109.12	318.0	-1,038.0	920.6	878.1	42.49	21.664	
6,700.0	6,620.0	6,696.8	6,568.2	20.9	25.4	109.19	321.5	-1,053.7	930.7	887.7	43.04	21.626	
6,800.0	6,719.7	6,815.0	6,685.9	21.1	25.7	109.21	323.9	-1,064.8	937.7	894.3	43.46	21.579	
6,900.0	6,819.6	6,933.7	6,804.3	21.2	25.8	109.21	325.2	-1,071.1	941.6	897.9	43.76	21.520	
7,000.0	6,919.6	7,049.2	6,919.8	21.3	25.9	103.42	325.6	-1,072.7	942.5	898.6	43.98	21.433	
7,100.0	7,019.6	7,150.1	7,020.7	21.4	26.0	103.42	325.4	-1,073.0	942.5	898.4	44.19	21.330	
7,200.0	7,119.6	7,251.1	7,121.7	21.5	26.1	103.43	325.1	-1,073.6	942.6	898.1	44.42	21.221	
7,300.0	7,219.6	7,352.0	7,222.7	21.6	26.2	103.43	324.5	-1,074.7	942.6	897.9	44.65	21.109	
7,400.0	7,319.6	7,452.1	7,322.7	21.8	26.3	103.43	323.7	-1,075.9	942.6	897.7	44.89	20.995	
7,500.0	7,419.6	7,552.1	7,422.7	21.9	26.4	103.43	323.0	-1,077.1	942.6	897.4	45.14	20.883	
7,600.0	7,519.6	7,652.1	7,522.7	22.0	26.5	103.43	322.3	-1,078.4	942.6	897.2	45.38	20.771	
7,700.0	7,619.5	7,752.1	7,622.7	22.1	26.6	103.43	321.6	-1,079.6	942.6	897.0	45.62	20.659	
7,800.0	7,719.5	7,852.1	7,722.7	22.3	26.7	103.43	320.9	-1,080.9	942.6	896.7	45.87	20.549	
7,900.0	7,819.5	7,952.1	7,822.7	22.4	26.8	103.43	320.2	-1,082.1	942.6	896.5	46.12	20.438	
8,000.0	7,919.5	8,052.1	7,922.7	22.5	27.0	103.43	319.5	-1,083.4	942.6	896.2	46.37	20.328	
8,100.0	8,019.5	8,152.1	8,022.6	22.6	27.1	103.43	318.7	-1,084.6	942.6	896.0	46.62	20.219	
8,200.0	8,119.5	8,252.1	8,122.6	22.8	27.2	103.43	318.0	-1,085.8	942.6	895.7	46.87	20.111	
8,300.0	8,219.5	8,352.1	8,222.6	22.9	27.3	103.43	317.3	-1,087.1	942.6	895.5	47.12	20.003	
8,400.0	8,319.5	8,452.1	8,322.6	23.0	27.4	103.43	316.6	-1,088.3	942.6	895.2	47.38	19.896	
8,500.0	8,419.5	8,552.1	8,422.6	23.2	27.5	103.43	315.9	-1,089.6	942.6	895.0	47.63	19.789	
8,600.0	8,519.5	8,652.1	8,522.6	23.3	27.6	103.43	315.2	-1,090.8	942.6	894.7	47.89	19.683	
8,700.0	8,619.4	8,752.1	8,622.6	23.4	27.7	103.43	314.4	-1,092.1	942.6	894.4	48.15	19.577	
8,800.0	8,719.4	8,852.1	8,722.6	23.6	27.8	103.43	313.7	-1,093.3	942.6	894.2	48.41	19.473	
8,900.0	8,819.4	8,952.1	8,822.6	23.7	27.9	103.43	313.0	-1,094.6	942.6	893.9	48.67	19.369	
9,000.0	8,919.4	9,052.1	8,922.6	23.8	28.1	103.43	312.3	-1,095.8	942.6	893.7	48.93	19.265	
9,100.0	9,019.4	9,152.1	9,022.5	24.0	28.2	103.43	311.6	-1,097.0	942.6	893.4	49.19	19.162	
9,200.0	9,119.4	9,252.1	9,122.5	24.1	28.3	103.43	310.9	-1,098.3	942.6	893.1	49.45	19.060	
9,300.0	9,219.4	9,352.1	9,222.5	24.2	28.4	103.43	310.1	-1,099.5	942.6	892.9	49.72	18.959	
9,400.0	9,319.4	9,452.1	9,322.5	24.4	28.5	103.43	309.4	-1,100.8	942.6	892.6	49.98	18.858	
9,500.0	9,419.4	9,552.1	9,422.5	24.5	28.6	103.43	308.7	-1,102.0	942.6	892.3	50.25	18.758	
9,600.0	9,519.3	9,652.1	9,522.5	24.6	28.7	103.43	308.0	-1,103.3	942.6	892.1	50.52	18.658	
9,700.0	9,619.3	9,752.1	9,622.5	24.8	28.9	103.43	307.3	-1,104.5	942.6	891.8	50.79	18.560	
9,800.0	9,719.3	9,852.1	9,722.5	24.9	29.0	103.43	306.6	-1,105.7	942.6	891.5	51.06	18.462	
9,900.0	9,819.3	9,952.1	9,822.5	25.0	29.1	103.43	305.8	-1,107.0	942.6	891.3	51.33	18.364	
9,911.7	9,831.0	9,963.8	9,834.1	25.1	29.1	103.43	305.8	-1,107.1	942.6	891.2	51.36	18.353	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM02C B21 696 - DD - Plan #1

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	29.46	35.0	19.7	40.2				
100.0	100.0	100.0	100.0	0.1	0.1	29.46	35.0	19.7	40.2	39.9	0.30	135.349	
200.0	200.0	200.0	200.0	0.3	0.3	29.46	35.0	19.7	40.2	39.5	0.65	62.187	
300.0	300.0	300.7	300.6	0.5	0.5	27.22	35.0	18.0	39.3	38.3	1.00	39.353	
400.0	400.0	401.1	400.9	0.7	0.7	19.98	34.9	12.7	37.2	35.8	1.36	27.273	
500.0	500.0	501.0	500.4	0.8	0.9	6.46	34.9	4.0	35.1	33.4	1.73	20.287	
524.2	524.2	525.1	524.4	0.9	1.0	127.99	34.9	1.3	35.0	33.1	1.88	18.609	CC, ES
600.0	600.0	600.4	599.1	1.0	1.2	114.94	34.8	-8.2	36.5	34.3	2.21	16.519	
700.0	699.8	699.5	697.0	1.2	1.5	100.86	34.7	-23.4	42.7	40.1	2.65	16.119	
800.0	799.5	799.0	795.2	1.4	1.8	94.03	34.6	-39.2	51.3	48.2	3.11	16.500	
900.0	898.7	898.5	893.5	1.7	2.1	92.46	34.6	-55.0	60.5	56.9	3.62	16.690	
1,000.0	997.5	998.1	991.8	1.9	2.4	94.09	34.5	-70.9	69.8	65.6	4.20	16.613	
1,100.0	1,096.1	1,097.6	1,090.0	2.2	2.8	96.17	34.4	-86.7	79.3	74.5	4.81	16.491	
1,200.0	1,194.7	1,197.1	1,188.3	2.5	3.1	97.81	34.3	-102.5	88.9	83.5	5.43	16.377	
1,300.0	1,293.3	1,296.6	1,286.5	2.9	3.4	99.13	34.2	-118.3	98.5	92.5	6.05	16.276	
1,400.0	1,392.0	1,396.1	1,384.8	3.2	3.7	100.22	34.1	-134.2	108.2	101.5	6.68	16.189	
1,500.0	1,490.6	1,495.6	1,483.0	3.5	4.1	101.13	34.0	-150.0	117.9	110.6	7.32	16.115	
1,600.0	1,589.2	1,595.1	1,581.3	3.8	4.4	101.90	34.0	-165.8	127.6	119.7	7.95	16.050	
1,700.0	1,687.8	1,694.7	1,679.5	4.2	4.7	102.56	33.9	-181.6	137.4	128.8	8.59	15.994	
1,800.0	1,786.4	1,794.2	1,777.8	4.5	5.0	103.13	33.8	-197.5	147.2	137.9	9.23	15.946	
1,900.0	1,885.1	1,893.7	1,876.0	4.8	5.4	103.63	33.7	-213.3	156.9	147.1	9.87	15.903	
2,000.0	1,983.7	1,993.2	1,974.3	5.2	5.7	104.07	33.6	-229.1	166.7	156.2	10.51	15.866	
2,100.0	2,082.3	2,092.7	2,072.5	5.5	6.0	104.46	33.5	-244.9	176.5	165.4	11.15	15.832	
2,200.0	2,180.9	2,192.2	2,170.7	5.8	6.3	104.82	33.4	-260.8	186.3	174.5	11.79	15.803	
2,300.0	2,279.5	2,291.7	2,269.0	6.2	6.7	105.13	33.3	-276.6	196.1	183.7	12.43	15.776	
2,400.0	2,378.2	2,391.2	2,367.2	6.5	7.0	105.42	33.3	-292.4	206.0	192.9	13.08	15.752	
2,500.0	2,476.8	2,490.8	2,465.5	6.8	7.3	105.68	33.2	-308.3	215.8	202.1	13.72	15.731	
2,600.0	2,575.4	2,590.3	2,563.7	7.2	7.7	105.92	33.1	-324.1	225.6	211.3	14.36	15.711	
2,700.0	2,674.0	2,689.8	2,662.0	7.5	8.0	106.13	33.0	-339.9	235.4	220.4	15.00	15.693	
2,800.0	2,772.6	2,789.3	2,760.2	7.8	8.3	106.33	32.9	-355.7	245.3	229.6	15.65	15.677	
2,900.0	2,871.3	2,888.8	2,858.5	8.2	8.6	106.52	32.8	-371.6	255.1	238.8	16.29	15.662	
3,000.0	2,969.9	2,988.3	2,956.7	8.5	9.0	106.69	32.7	-387.4	265.0	248.0	16.93	15.648	
3,100.0	3,068.5	3,087.8	3,055.0	8.9	9.3	106.85	32.7	-403.2	274.8	257.2	17.58	15.635	
3,200.0	3,167.1	3,187.3	3,153.2	9.2	9.6	107.00	32.6	-419.0	284.6	266.4	18.22	15.623	
3,300.0	3,265.7	3,286.8	3,251.4	9.5	10.0	107.14	32.5	-434.9	294.5	275.6	18.86	15.612	
3,400.0	3,364.4	3,386.4	3,349.7	9.9	10.3	107.26	32.4	-450.7	304.3	284.8	19.51	15.602	
3,500.0	3,463.0	3,485.9	3,447.9	10.2	10.6	107.39	32.3	-466.5	314.2	294.0	20.15	15.592	
3,600.0	3,561.6	3,585.4	3,546.2	10.5	10.9	107.50	32.2	-482.3	324.0	303.2	20.79	15.583	
3,700.0	3,660.2	3,684.9	3,644.4	10.9	11.3	107.61	32.1	-498.2	333.9	312.4	21.44	15.575	
3,800.0	3,758.8	3,784.4	3,742.7	11.2	11.6	107.71	32.0	-514.0	343.7	321.6	22.08	15.567	
3,900.0	3,857.5	3,883.9	3,840.9	11.6	11.9	107.80	32.0	-529.8	353.6	330.9	22.72	15.560	
4,000.0	3,956.1	3,983.4	3,939.2	11.9	12.3	107.89	31.9	-545.6	363.4	340.1	23.37	15.553	
4,100.0	4,054.7	4,082.9	4,037.4	12.2	12.6	107.98	31.8	-561.5	373.3	349.3	24.01	15.546	
4,200.0	4,153.3	4,182.5	4,135.7	12.6	12.9	108.06	31.7	-577.3	383.1	358.5	24.66	15.540	
4,300.0	4,251.9	4,282.0	4,233.9	12.9	13.2	108.14	31.6	-593.1	393.0	367.7	25.30	15.534	
4,400.0	4,350.6	4,381.5	4,332.1	13.2	13.6	108.21	31.5	-608.9	402.9	376.9	25.94	15.528	
4,500.0	4,449.2	4,481.0	4,430.4	13.6	13.9	108.28	31.4	-624.8	412.7	386.1	26.59	15.523	
4,600.0	4,547.8	4,580.5	4,528.6	13.9	14.2	108.34	31.4	-640.6	422.6	395.3	27.23	15.518	
4,700.0	4,646.4	4,680.0	4,626.9	14.3	14.6	108.41	31.3	-656.4	432.4	404.6	27.88	15.513	
4,800.0	4,745.0	4,779.5	4,725.1	14.6	14.9	108.47	31.2	-672.2	442.3	413.8	28.52	15.508	
4,900.0	4,843.7	4,879.0	4,823.4	14.9	15.2	108.53	31.1	-688.1	452.1	423.0	29.16	15.504	
5,000.0	4,942.3	4,978.6	4,921.6	15.3	15.6	108.58	31.0	-703.9	462.0	432.2	29.81	15.500	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM02C B21 696 - DD - Plan #1

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	5,040.9	5,078.1	5,019.9	15.6	15.9	108.63	30.9	-719.7	471.9	441.4	30.45	15.496	
5,200.0	5,139.5	5,177.6	5,118.1	16.0	16.2	108.69	30.8	-735.5	481.7	450.6	31.09	15.492	
5,300.0	5,238.1	5,277.1	5,216.3	16.3	16.5	108.73	30.7	-751.4	491.6	459.8	31.74	15.488	
5,400.0	5,336.8	5,376.6	5,314.6	16.6	16.9	108.78	30.7	-767.2	501.4	469.1	32.38	15.485	
5,500.0	5,435.4	5,476.1	5,412.8	17.0	17.2	108.83	30.6	-783.0	511.3	478.3	33.03	15.481	
5,600.0	5,534.0	5,575.6	5,511.1	17.3	17.5	108.87	30.5	-798.8	521.2	487.5	33.67	15.478	
5,700.0	5,632.6	5,675.1	5,609.3	17.7	17.9	108.91	30.4	-814.7	531.0	496.7	34.32	15.475	
5,800.0	5,731.2	5,774.6	5,707.6	18.0	18.2	108.95	30.3	-830.5	540.9	505.9	34.96	15.472	
5,900.0	5,829.9	5,874.2	5,805.8	18.3	18.5	108.99	30.2	-846.3	550.8	515.1	35.60	15.469	
6,000.0	5,928.5	5,973.7	5,904.1	18.7	18.8	109.03	30.1	-862.1	560.6	524.4	36.25	15.466	
6,100.0	6,027.1	6,073.2	6,002.3	19.0	19.2	109.06	30.1	-878.0	570.5	533.6	36.89	15.464	
6,200.0	6,125.7	6,172.7	6,100.6	19.4	19.5	109.10	30.0	-893.8	580.3	542.8	37.54	15.461	
6,300.0	6,224.3	6,272.2	6,198.8	19.7	19.8	109.13	29.9	-909.6	590.2	552.0	38.18	15.459	
6,400.0	6,323.0	6,371.7	6,297.0	20.0	20.2	109.17	29.8	-925.4	600.1	561.2	38.82	15.456	
6,500.0	6,421.6	6,471.2	6,395.3	20.4	20.5	109.22	29.7	-941.3	609.9	570.4	39.47	15.453	
6,600.0	6,520.6	6,574.2	6,497.0	20.6	20.8	109.27	29.6	-957.1	618.9	578.8	40.06	15.448	
6,700.0	6,620.0	6,680.2	6,602.3	20.9	21.1	109.26	29.5	-969.9	625.8	585.3	40.56	15.430	
6,800.0	6,719.7	6,786.6	6,708.2	21.1	21.3	109.24	29.5	-978.8	630.6	589.6	40.95	15.399	
6,900.0	6,819.6	6,893.0	6,814.6	21.2	21.4	109.21	29.5	-983.8	633.2	591.9	41.24	15.355	
7,000.0	6,919.6	6,998.2	6,919.7	21.3	21.5	103.41	29.5	-985.0	633.7	592.2	41.45	15.288	
7,100.0	7,019.6	7,098.9	7,020.4	21.4	21.6	103.42	29.3	-985.3	633.7	592.0	41.67	15.207	
7,200.0	7,119.6	7,199.5	7,121.0	21.5	21.8	103.43	28.9	-986.0	633.7	591.8	41.91	15.121	
7,300.0	7,219.6	7,300.2	7,221.7	21.6	21.9	103.43	28.3	-987.0	633.7	591.6	42.16	15.032	
7,400.0	7,319.6	7,400.2	7,321.7	21.8	22.0	103.43	27.6	-988.2	633.7	591.3	42.41	14.944	
7,500.0	7,419.6	7,500.2	7,421.7	21.9	22.1	103.43	26.9	-989.5	633.7	591.1	42.66	14.856	
7,600.0	7,519.6	7,600.2	7,521.7	22.0	22.2	103.43	26.2	-990.7	633.7	590.8	42.91	14.768	
7,700.0	7,619.5	7,700.2	7,621.7	22.1	22.4	103.43	25.4	-992.0	633.7	590.6	43.17	14.681	
7,800.0	7,719.5	7,800.2	7,721.7	22.3	22.5	103.43	24.7	-993.2	633.7	590.3	43.42	14.595	
7,900.0	7,819.5	7,900.2	7,821.6	22.4	22.6	103.43	24.0	-994.5	633.7	590.0	43.68	14.509	
8,000.0	7,919.5	8,000.2	7,921.6	22.5	22.7	103.43	23.3	-995.7	633.7	589.8	43.94	14.424	
8,100.0	8,019.5	8,100.2	8,021.6	22.6	22.8	103.43	22.6	-996.9	633.7	589.5	44.20	14.339	
8,200.0	8,119.5	8,200.2	8,121.6	22.8	23.0	103.43	21.9	-998.2	633.7	589.3	44.46	14.255	
8,300.0	8,219.5	8,300.2	8,221.6	22.9	23.1	103.43	21.1	-999.4	633.7	589.0	44.72	14.171	
8,400.0	8,319.5	8,400.2	8,321.6	23.0	23.2	103.43	20.4	-1,000.7	633.7	588.7	44.98	14.088	
8,500.0	8,419.5	8,500.2	8,421.6	23.2	23.4	103.43	19.7	-1,001.9	633.7	588.5	45.25	14.006	
8,600.0	8,519.5	8,600.2	8,521.6	23.3	23.5	103.43	19.0	-1,003.2	633.7	588.2	45.51	13.924	
8,700.0	8,619.4	8,700.2	8,621.6	23.4	23.6	103.43	18.3	-1,004.4	633.7	587.9	45.78	13.843	
8,800.0	8,719.4	8,800.2	8,721.6	23.6	23.7	103.43	17.6	-1,005.6	633.7	587.7	46.05	13.762	
8,900.0	8,819.4	8,900.2	8,821.5	23.7	23.9	103.43	16.8	-1,006.9	633.7	587.4	46.32	13.682	
9,000.0	8,919.4	9,000.2	8,921.5	23.8	24.0	103.43	16.1	-1,008.1	633.7	587.1	46.59	13.603	
9,100.0	9,019.4	9,100.2	9,021.5	24.0	24.1	103.43	15.4	-1,009.4	633.7	586.9	46.86	13.524	
9,200.0	9,119.4	9,200.2	9,121.5	24.1	24.3	103.43	14.7	-1,010.6	633.7	586.6	47.13	13.446	
9,300.0	9,219.4	9,300.2	9,221.5	24.2	24.4	103.43	14.0	-1,011.9	633.7	586.3	47.40	13.369	
9,400.0	9,319.4	9,400.2	9,321.5	24.4	24.5	103.44	13.3	-1,013.1	633.7	586.0	47.68	13.292	
9,500.0	9,419.4	9,500.2	9,421.5	24.5	24.7	103.44	12.5	-1,014.3	633.7	585.8	47.95	13.215	
9,600.0	9,519.3	9,600.2	9,521.5	24.6	24.8	103.44	11.8	-1,015.6	633.7	585.5	48.23	13.139	
9,700.0	9,619.3	9,700.2	9,621.5	24.8	24.9	103.44	11.1	-1,016.8	633.7	585.2	48.51	13.064	
9,800.0	9,719.3	9,800.2	9,721.4	24.9	25.1	103.44	10.4	-1,018.1	633.7	584.9	48.79	12.990	
9,900.0	9,819.3	9,900.2	9,821.4	25.0	25.2	103.44	9.7	-1,019.3	633.7	584.6	49.07	12.916	
9,911.7	9,831.0	9,911.9	9,833.1	25.1	25.2	103.44	9.6	-1,019.5	633.7	584.6	49.10	12.907	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM02D B21 696 - DD - Plan #1

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	30.15	8.7	5.1	10.1				
100.0	100.0	100.0	100.0	0.1	0.1	30.15	8.7	5.1	10.1	9.8	0.30	34.074	
200.0	200.0	200.0	200.0	0.3	0.3	30.15	8.7	5.1	10.1	9.5	0.65	15.655	
300.0	300.0	300.0	300.0	0.5	0.5	30.15	8.7	5.1	10.1	9.1	0.99	10.162	
400.0	400.0	400.0	400.0	0.7	0.7	30.15	8.7	5.1	10.1	8.8	1.34	7.523	
500.0	500.0	500.0	500.0	0.8	0.8	30.15	8.7	5.1	10.1	8.4	1.69	5.972	CC
600.0	600.0	600.3	600.3	1.0	1.0	153.73	8.1	3.4	10.3	8.3	2.04	5.063	ES
700.0	699.8	700.5	700.4	1.2	1.2	147.96	6.2	-1.5	11.1	8.7	2.40	4.631	
800.0	799.5	800.8	800.2	1.4	1.4	140.08	3.1	-9.6	12.6	9.8	2.79	4.524	SF
900.0	898.7	901.0	899.7	1.7	1.7	131.90	-1.4	-21.1	15.0	11.8	3.24	4.628	
1,000.0	997.5	1,001.1	998.6	1.9	2.0	124.46	-7.0	-35.7	18.3	14.5	3.79	4.834	
1,100.0	1,096.1	1,101.2	1,096.8	2.2	2.3	112.79	-13.9	-53.5	21.6	17.1	4.47	4.830	
1,200.0	1,194.7	1,201.0	1,194.3	2.5	2.7	100.32	-21.5	-73.0	25.6	20.4	5.18	4.937	
1,300.0	1,293.3	1,300.7	1,291.9	2.9	3.0	91.49	-29.0	-92.5	30.4	24.6	5.85	5.201	
1,400.0	1,392.0	1,400.5	1,389.5	3.2	3.4	85.19	-36.5	-112.0	35.8	29.3	6.49	5.516	
1,500.0	1,490.6	1,500.3	1,487.1	3.5	3.8	80.57	-44.1	-131.5	41.5	34.4	7.11	5.836	
1,600.0	1,589.2	1,600.1	1,584.7	3.8	4.2	77.08	-51.6	-151.0	47.4	39.7	7.72	6.141	
1,700.0	1,687.8	1,699.9	1,682.2	4.2	4.6	74.37	-59.2	-170.4	53.4	45.1	8.32	6.424	
1,800.0	1,786.4	1,799.7	1,779.8	4.5	5.0	72.22	-66.7	-189.9	59.6	50.7	8.91	6.682	
1,900.0	1,885.1	1,899.5	1,877.4	4.8	5.4	70.47	-74.2	-209.4	65.8	56.3	9.51	6.918	
2,000.0	1,983.7	1,999.3	1,975.0	5.2	5.8	69.02	-81.8	-228.9	72.0	61.9	10.10	7.132	
2,100.0	2,082.3	2,099.1	2,072.5	5.5	6.2	67.80	-89.3	-248.4	78.3	67.6	10.69	7.326	
2,200.0	2,180.9	2,198.9	2,170.1	5.8	6.6	66.76	-96.8	-267.9	84.6	73.3	11.28	7.504	
2,300.0	2,279.5	2,298.6	2,267.7	6.2	7.0	65.87	-104.4	-287.4	91.0	79.1	11.86	7.666	
2,400.0	2,378.2	2,398.4	2,365.3	6.5	7.4	65.09	-111.9	-306.8	97.3	84.9	12.45	7.815	
2,500.0	2,476.8	2,498.2	2,462.9	6.8	7.8	64.41	-119.5	-326.3	103.7	90.6	13.04	7.952	
2,600.0	2,575.4	2,598.0	2,560.4	7.2	8.2	63.81	-127.0	-345.8	110.1	96.4	13.63	8.077	
2,700.0	2,674.0	2,697.8	2,658.0	7.5	8.6	63.28	-134.5	-365.3	116.5	102.2	14.21	8.194	
2,800.0	2,772.6	2,797.6	2,755.6	7.8	9.0	62.80	-142.1	-384.8	122.9	108.1	14.80	8.301	
2,900.0	2,871.3	2,897.4	2,853.2	8.2	9.4	62.36	-149.6	-404.3	129.3	113.9	15.39	8.401	
3,000.0	2,969.9	2,997.2	2,950.8	8.5	9.8	61.97	-157.2	-423.7	135.7	119.7	15.98	8.494	
3,100.0	3,068.5	3,097.0	3,048.3	8.9	10.2	61.62	-164.7	-443.2	142.1	125.6	16.56	8.581	
3,200.0	3,167.1	3,196.8	3,145.9	9.2	10.7	61.29	-172.2	-462.7	148.6	131.4	17.15	8.662	
3,300.0	3,265.7	3,296.5	3,243.5	9.5	11.1	60.99	-179.8	-482.2	155.0	137.3	17.74	8.738	
3,400.0	3,364.4	3,396.3	3,341.1	9.9	11.5	60.72	-187.3	-501.7	161.4	143.1	18.33	8.809	
3,500.0	3,463.0	3,496.1	3,438.6	10.2	11.9	60.47	-194.8	-521.2	167.9	149.0	18.91	8.876	
3,600.0	3,561.6	3,595.9	3,536.2	10.5	12.3	60.23	-202.4	-540.7	174.3	154.8	19.50	8.939	
3,700.0	3,660.2	3,695.7	3,633.8	10.9	12.7	60.01	-209.9	-560.1	180.8	160.7	20.09	8.999	
3,800.0	3,758.8	3,795.5	3,731.4	11.2	13.1	59.81	-217.5	-579.6	187.2	166.5	20.68	9.055	
3,900.0	3,857.5	3,895.3	3,829.0	11.6	13.5	59.62	-225.0	-599.1	193.7	172.4	21.26	9.108	
4,000.0	3,956.1	3,995.1	3,926.5	11.9	13.9	59.44	-232.5	-618.6	200.1	178.3	21.85	9.159	
4,100.0	4,054.7	4,094.9	4,024.1	12.2	14.3	59.28	-240.1	-638.1	206.6	184.1	22.44	9.206	
4,200.0	4,153.3	4,194.6	4,121.7	12.6	14.7	59.12	-247.6	-657.6	213.0	190.0	23.03	9.252	
4,300.0	4,251.9	4,294.4	4,219.3	12.9	15.1	58.98	-255.1	-677.1	219.5	195.9	23.61	9.295	
4,400.0	4,350.6	4,394.2	4,316.8	13.2	15.6	58.84	-262.7	-696.5	226.0	201.8	24.20	9.336	
4,500.0	4,449.2	4,494.0	4,414.4	13.6	16.0	58.71	-270.2	-716.0	232.4	207.6	24.79	9.376	
4,600.0	4,547.8	4,595.2	4,513.3	13.9	16.4	58.60	-277.8	-735.7	238.8	213.4	25.38	9.409	
4,700.0	4,646.4	4,701.4	4,617.8	14.3	16.7	58.93	-284.9	-753.9	243.4	217.4	26.05	9.345	
4,800.0	4,745.0	4,807.7	4,723.0	14.6	17.0	59.91	-290.5	-768.4	245.4	218.6	26.82	9.150	
4,900.0	4,843.7	4,913.8	4,828.4	14.9	17.3	61.53	-294.7	-779.3	244.9	217.2	27.70	8.842	
5,000.0	4,942.3	5,019.3	4,933.6	15.3	17.5	63.84	-297.5	-786.5	242.1	213.5	28.68	8.443	
5,100.0	5,040.9	5,124.0	5,038.2	15.6	17.6	66.90	-298.9	-790.1	237.5	207.7	29.76	7.981	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM02D B21 696 - DD - Plan #1

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	5,139.5	5,225.1	5,139.3	16.0	17.7	70.61	-299.1	-790.6	231.7	200.8	30.89	7.501	
5,300.0	5,238.1	5,323.4	5,237.6	16.3	17.8	74.40	-299.3	-791.0	226.9	194.9	31.97	7.096	
5,400.0	5,336.8	5,422.0	5,336.2	16.6	17.9	78.25	-299.7	-791.7	223.2	190.2	32.98	6.767	
5,500.0	5,435.4	5,520.7	5,434.9	17.0	18.0	82.21	-300.1	-792.4	220.6	186.6	33.91	6.504	
5,600.0	5,534.0	5,619.5	5,533.7	17.3	18.1	86.23	-300.5	-793.1	219.0	184.3	34.74	6.305	
5,685.0	5,617.9	5,703.5	5,617.7	17.6	18.2	89.69	-300.9	-793.8	218.6	183.3	35.36	6.183	
5,700.0	5,632.6	5,718.3	5,632.4	17.7	18.2	90.30	-301.0	-793.9	218.6	183.2	35.46	6.166	
5,800.0	5,731.2	5,817.0	5,731.2	18.0	18.3	94.35	-301.4	-794.6	219.4	183.3	36.06	6.084	
5,900.0	5,829.9	5,915.8	5,830.0	18.3	18.4	98.36	-301.8	-795.3	221.2	184.7	36.53	6.056	
6,000.0	5,928.5	6,014.5	5,928.7	18.7	18.5	102.29	-302.2	-796.1	224.2	187.3	36.88	6.079	
6,100.0	6,027.1	6,113.3	6,027.5	19.0	18.6	106.10	-302.7	-796.8	228.1	191.0	37.11	6.148	
6,200.0	6,125.7	6,212.1	6,126.2	19.4	18.7	109.76	-303.1	-797.6	233.1	195.9	37.24	6.260	
6,300.0	6,224.3	6,310.8	6,225.0	19.7	18.8	113.27	-303.5	-798.3	239.0	201.7	37.29	6.411	
6,400.0	6,323.0	6,409.6	6,323.7	20.0	19.0	116.59	-303.9	-799.0	245.8	208.5	37.26	6.597	
6,500.0	6,421.6	6,508.3	6,422.5	20.4	19.1	119.74	-304.4	-799.8	253.3	216.2	37.18	6.815	
6,600.0	6,520.6	6,607.4	6,521.6	20.6	19.2	122.41	-304.8	-800.5	260.4	223.3	37.08	7.024	
6,700.0	6,620.0	6,706.9	6,621.1	20.9	19.3	124.31	-305.2	-801.2	266.0	229.0	37.04	7.181	
6,800.0	6,719.7	6,806.7	6,720.8	21.1	19.4	125.50	-305.6	-802.0	269.8	232.7	37.09	7.275	
6,900.0	6,819.6	6,906.6	6,820.8	21.2	19.5	126.04	-306.1	-802.7	271.7	234.4	37.22	7.298	
7,000.0	6,919.6	7,006.6	6,920.8	21.3	19.7	120.24	-306.5	-803.5	271.6	234.2	37.46	7.251	
7,100.0	7,019.6	7,106.6	7,020.8	21.4	19.8	120.15	-306.9	-804.2	271.4	233.7	37.73	7.194	
7,158.9	7,078.5	7,165.6	7,079.7	21.5	19.9	120.14	-307.2	-804.7	271.3	233.5	37.88	7.164	
7,200.0	7,119.6	7,206.6	7,120.8	21.5	19.9	120.14	-307.4	-805.0	271.4	233.4	37.98	7.145	
7,300.0	7,219.6	7,306.6	7,220.8	21.6	20.0	120.22	-307.8	-805.7	271.6	233.3	38.22	7.105	
7,400.0	7,319.6	7,406.6	7,320.8	21.8	20.1	120.32	-308.2	-806.5	271.9	233.4	38.46	7.068	
7,500.0	7,419.6	7,506.6	7,420.8	21.9	20.3	120.43	-308.6	-807.2	272.1	233.4	38.70	7.032	
7,600.0	7,519.6	7,606.6	7,520.7	22.0	20.4	120.53	-309.1	-807.9	272.4	233.5	38.94	6.997	
7,700.0	7,619.5	7,706.6	7,620.7	22.1	20.5	120.64	-309.5	-808.7	272.7	233.5	39.18	6.961	
7,800.0	7,719.5	7,806.6	7,720.7	22.3	20.6	120.74	-309.9	-809.4	273.0	233.6	39.42	6.925	
7,900.0	7,819.5	7,906.6	7,820.7	22.4	20.8	120.84	-310.4	-810.2	273.3	233.6	39.67	6.890	
8,000.0	7,919.5	8,006.6	7,920.7	22.5	20.9	120.95	-310.8	-810.9	273.6	233.7	39.91	6.855	
8,100.0	8,019.5	8,106.6	8,020.7	22.6	21.0	121.05	-311.2	-811.7	273.9	233.7	40.16	6.820	
8,200.0	8,119.5	8,206.6	8,120.7	22.8	21.2	121.15	-311.7	-812.4	274.2	233.8	40.41	6.785	
8,300.0	8,219.5	8,306.6	8,220.7	22.9	21.3	121.26	-312.1	-813.2	274.5	233.8	40.66	6.751	
8,400.0	8,319.5	8,406.6	8,320.7	23.0	21.4	121.36	-312.5	-813.9	274.8	233.9	40.91	6.717	
8,500.0	8,419.5	8,506.6	8,420.7	23.2	21.5	121.46	-312.9	-814.7	275.1	233.9	41.17	6.683	
8,600.0	8,519.5	8,606.6	8,520.7	23.3	21.7	121.57	-313.4	-815.4	275.4	234.0	41.42	6.649	
8,700.0	8,619.4	8,706.6	8,620.7	23.4	21.8	121.67	-313.8	-816.1	275.7	234.0	41.68	6.615	
8,800.0	8,719.4	8,806.6	8,720.7	23.6	21.9	121.77	-314.2	-816.9	276.0	234.1	41.93	6.582	
8,900.0	8,819.4	8,906.6	8,820.7	23.7	22.1	121.87	-314.7	-817.6	276.3	234.1	42.19	6.549	
9,000.0	8,919.4	9,006.6	8,920.7	23.8	22.2	121.97	-315.1	-818.4	276.6	234.2	42.45	6.516	
9,100.0	9,019.4	9,106.6	9,020.7	24.0	22.3	122.07	-315.5	-819.1	276.9	234.2	42.71	6.483	
9,200.0	9,119.4	9,206.6	9,120.7	24.1	22.5	122.17	-316.0	-819.9	277.2	234.2	42.97	6.451	
9,300.0	9,219.4	9,306.6	9,220.7	24.2	22.6	122.28	-316.4	-820.6	277.5	234.3	43.24	6.419	
9,400.0	9,319.4	9,406.6	9,320.6	24.4	22.7	122.38	-316.8	-821.4	277.8	234.3	43.50	6.387	
9,500.0	9,419.4	9,506.6	9,420.6	24.5	22.9	122.48	-317.2	-822.1	278.1	234.4	43.77	6.355	
9,600.0	9,519.3	9,606.6	9,520.6	24.6	23.0	122.58	-317.7	-822.9	278.5	234.4	44.03	6.324	
9,700.0	9,619.3	9,706.6	9,620.6	24.8	23.2	122.68	-318.1	-823.6	278.8	234.5	44.30	6.293	
9,800.0	9,719.3	9,806.6	9,720.6	24.9	23.3	122.78	-318.5	-824.3	279.1	234.5	44.57	6.262	
9,900.0	9,819.3	9,906.6	9,820.6	25.0	23.4	122.88	-319.0	-825.1	279.4	234.5	44.84	6.231	
9,911.7	9,831.0	9,918.3	9,832.3	25.1	23.4	122.89	-319.0	-825.2	279.4	234.6	44.87	6.227	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM07B B21 696 - DD - Plan #1

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	-151.25	-8.7	-4.8	10.0				
100.0	100.0	100.0	100.0	0.1	0.1	-151.25	-8.7	-4.8	10.0	9.7	0.30	33.606	
200.0	200.0	200.0	200.0	0.3	0.3	-151.25	-8.7	-4.8	10.0	9.3	0.65	15.441	
300.0	300.0	300.0	300.0	0.5	0.5	-151.25	-8.7	-4.8	10.0	9.0	0.99	10.023	
400.0	400.0	400.0	400.0	0.7	0.7	-151.25	-8.7	-4.8	10.0	8.6	1.34	7.420	CC, ES
500.0	500.0	499.6	499.6	0.8	0.8	-148.61	-9.9	-6.1	11.6	9.9	1.69	6.869	SF
600.0	600.0	599.1	599.0	1.0	1.0	-20.24	-13.5	-9.8	15.1	13.0	2.04	7.385	
700.0	699.8	698.5	697.9	1.2	1.2	-19.91	-19.4	-16.1	18.6	16.2	2.39	7.794	
800.0	799.5	797.7	796.4	1.4	1.5	-20.82	-27.6	-24.9	22.3	19.6	2.74	8.124	
900.0	898.7	896.8	894.4	1.7	1.8	-22.42	-38.2	-36.1	26.1	23.0	3.11	8.385	
1,000.0	997.5	995.8	991.5	1.9	2.1	-24.37	-51.0	-49.8	30.1	26.6	3.50	8.601	
1,100.0	1,096.1	1,095.4	1,088.8	2.2	2.5	-25.33	-65.6	-65.3	35.6	31.7	3.91	9.115	
1,200.0	1,194.7	1,195.2	1,186.3	2.5	2.9	-25.98	-80.3	-81.0	41.2	36.9	4.32	9.539	
1,300.0	1,293.3	1,295.1	1,283.8	2.9	3.3	-26.47	-95.1	-96.6	46.8	42.1	4.74	9.876	
1,400.0	1,392.0	1,394.9	1,381.3	3.2	3.7	-26.86	-109.8	-112.3	52.5	47.3	5.17	10.147	
1,500.0	1,490.6	1,494.8	1,478.8	3.5	4.1	-27.17	-124.5	-127.9	58.1	52.5	5.60	10.369	
1,600.0	1,589.2	1,594.6	1,576.3	3.8	4.5	-27.43	-139.2	-143.6	63.7	57.7	6.04	10.554	
1,700.0	1,687.8	1,694.5	1,673.8	4.2	4.9	-27.65	-153.9	-159.3	69.3	62.9	6.47	10.709	
1,800.0	1,786.4	1,794.3	1,771.3	4.5	5.3	-27.83	-168.6	-174.9	75.0	68.0	6.91	10.842	
1,900.0	1,885.1	1,894.1	1,868.8	4.8	5.7	-27.99	-183.4	-190.6	80.6	73.2	7.36	10.955	
2,000.0	1,983.7	1,994.0	1,966.3	5.2	6.1	-28.13	-198.1	-206.2	86.2	78.4	7.80	11.054	
2,100.0	2,082.3	2,093.8	2,063.8	5.5	6.5	-28.25	-212.8	-221.9	91.9	83.6	8.24	11.140	
2,200.0	2,180.9	2,193.7	2,161.3	5.8	7.0	-28.36	-227.5	-237.5	97.5	88.8	8.69	11.217	
2,300.0	2,279.5	2,293.5	2,258.8	6.2	7.4	-28.45	-242.2	-253.2	103.1	94.0	9.14	11.284	
2,400.0	2,378.2	2,393.3	2,356.3	6.5	7.8	-28.54	-256.9	-268.9	108.7	99.2	9.59	11.344	
2,500.0	2,476.8	2,493.2	2,453.8	6.8	8.2	-28.61	-271.7	-284.5	114.4	104.3	10.03	11.398	
2,600.0	2,575.4	2,593.0	2,551.3	7.2	8.6	-28.68	-286.4	-300.2	120.0	109.5	10.48	11.447	
2,700.0	2,674.0	2,692.9	2,648.8	7.5	9.0	-28.75	-301.1	-315.8	125.6	114.7	10.93	11.491	
2,800.0	2,772.6	2,792.7	2,746.3	7.8	9.4	-28.80	-315.8	-331.5	131.3	119.9	11.38	11.532	
2,900.0	2,871.3	2,892.5	2,843.8	8.2	9.9	-28.86	-330.5	-347.1	136.9	125.1	11.83	11.569	
3,000.0	2,969.9	2,992.4	2,941.3	8.5	10.3	-28.91	-345.2	-362.8	142.5	130.2	12.28	11.602	
3,100.0	3,068.5	3,092.2	3,038.8	8.9	10.7	-28.95	-360.0	-378.5	148.2	135.4	12.74	11.633	
3,200.0	3,167.1	3,192.1	3,136.3	9.2	11.1	-28.99	-374.7	-394.1	153.8	140.6	13.19	11.662	
3,300.0	3,265.7	3,291.9	3,233.8	9.5	11.5	-29.03	-389.4	-409.8	159.4	145.8	13.64	11.688	
3,400.0	3,364.4	3,391.8	3,331.3	9.9	11.9	-29.07	-404.1	-425.4	165.1	151.0	14.09	11.713	
3,500.0	3,463.0	3,491.6	3,428.8	10.2	12.3	-29.10	-418.8	-441.1	170.7	156.1	14.54	11.736	
3,600.0	3,561.6	3,591.4	3,526.3	10.5	12.8	-29.13	-433.5	-456.7	176.3	161.3	15.00	11.757	
3,700.0	3,660.2	3,691.3	3,623.9	10.9	13.2	-29.16	-448.3	-472.4	182.0	166.5	15.45	11.777	
3,800.0	3,758.8	3,791.1	3,721.4	11.2	13.6	-29.19	-463.0	-488.1	187.6	171.7	15.90	11.796	
3,900.0	3,857.5	3,891.0	3,818.9	11.6	14.0	-29.22	-477.7	-503.7	193.2	176.9	16.36	11.813	
4,000.0	3,956.1	3,990.8	3,916.4	11.9	14.4	-29.24	-492.4	-519.4	198.9	182.0	16.81	11.830	
4,100.0	4,054.7	4,090.6	4,013.9	12.2	14.8	-29.27	-507.1	-535.0	204.5	187.2	17.26	11.845	
4,200.0	4,153.3	4,190.5	4,111.4	12.6	15.3	-29.29	-521.8	-550.7	210.1	192.4	17.72	11.860	
4,300.0	4,251.9	4,290.3	4,208.9	12.9	15.7	-29.31	-536.6	-566.3	215.8	197.6	18.17	11.874	
4,400.0	4,350.6	4,390.2	4,306.4	13.2	16.1	-29.33	-551.3	-582.0	221.4	202.8	18.62	11.887	
4,500.0	4,449.2	4,490.0	4,403.9	13.6	16.5	-29.35	-566.0	-597.7	227.0	207.9	19.08	11.899	
4,600.0	4,547.8	4,589.9	4,501.4	13.9	16.9	-29.37	-580.7	-613.3	232.6	213.1	19.53	11.911	
4,700.0	4,646.4	4,689.7	4,598.9	14.3	17.3	-29.38	-595.4	-629.0	238.3	218.3	19.99	11.922	
4,800.0	4,745.0	4,789.5	4,696.4	14.6	17.8	-29.40	-610.1	-644.6	243.9	223.5	20.44	11.933	
4,900.0	4,843.7	4,889.4	4,793.9	14.9	18.2	-29.42	-624.9	-660.3	249.5	228.7	20.89	11.943	
5,000.0	4,942.3	4,989.2	4,891.4	15.3	18.6	-29.43	-639.6	-675.9	255.2	233.8	21.35	11.953	
5,100.0	5,040.9	5,089.1	4,988.9	15.6	19.0	-29.44	-654.3	-691.6	260.8	239.0	21.80	11.962	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM07B B21 696 - DD - Plan #1

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	5,139.5	5,188.9	5,086.4	16.0	19.4	-29.46	-669.0	-707.3	266.4	244.2	22.26	11.971	
5,300.0	5,238.1	5,288.7	5,183.9	16.3	19.9	-29.47	-683.7	-722.9	272.1	249.4	22.71	11.979	
5,400.0	5,336.8	5,388.6	5,281.4	16.6	20.3	-29.48	-698.4	-738.6	277.7	254.5	23.17	11.987	
5,500.0	5,435.4	5,488.4	5,378.9	17.0	20.7	-29.50	-713.2	-754.2	283.3	259.7	23.62	11.995	
5,600.0	5,534.0	5,588.3	5,476.4	17.3	21.1	-29.51	-727.9	-769.9	289.0	264.9	24.08	12.002	
5,700.0	5,632.6	5,688.1	5,573.9	17.7	21.5	-29.52	-742.6	-785.5	294.6	270.1	24.53	12.009	
5,800.0	5,731.2	5,787.9	5,671.4	18.0	21.9	-29.53	-757.3	-801.2	300.2	275.3	24.99	12.016	
5,900.0	5,829.9	5,887.8	5,768.9	18.3	22.4	-29.54	-772.0	-816.9	305.9	280.4	25.44	12.023	
6,000.0	5,928.5	5,987.6	5,866.4	18.7	22.8	-29.55	-786.7	-832.5	311.5	285.6	25.90	12.029	
6,100.0	6,027.1	6,087.5	5,963.9	19.0	23.2	-29.56	-801.5	-848.2	317.1	290.8	26.35	12.035	
6,200.0	6,125.7	6,187.3	6,061.4	19.4	23.6	-29.57	-816.2	-863.8	322.8	296.0	26.81	12.041	
6,300.0	6,224.3	6,287.2	6,158.9	19.7	24.0	-29.58	-830.9	-879.5	328.4	301.1	27.26	12.047	
6,400.0	6,323.0	6,387.9	6,257.2	20.0	24.4	-29.59	-845.7	-895.3	334.0	306.3	27.72	12.051	
6,500.0	6,421.6	6,500.0	6,367.2	20.4	24.8	-29.76	-860.6	-911.1	337.6	309.4	28.24	11.956	
6,600.0	6,520.6	6,612.2	6,478.1	20.6	25.2	-30.01	-872.5	-923.7	339.5	310.8	28.74	11.815	
6,700.0	6,620.0	6,724.5	6,589.6	20.9	25.4	-30.21	-881.4	-933.2	340.9	311.7	29.17	11.684	
6,800.0	6,719.7	6,836.8	6,701.6	21.1	25.6	-30.36	-887.3	-939.5	341.6	312.1	29.55	11.562	
6,900.0	6,819.6	6,949.2	6,813.9	21.2	25.7	-30.46	-890.2	-942.6	341.7	311.9	29.85	11.447	
6,997.5	6,917.1	7,051.8	6,916.5	21.3	25.8	-34.89	-890.6	-943.0	341.2	311.1	30.13	11.323	
7,000.0	6,919.6	7,054.3	6,919.0	21.3	25.8	-36.25	-890.6	-943.0	341.6	311.5	30.12	11.339	
7,100.0	7,019.6	7,153.1	7,017.8	21.4	25.9	-36.24	-890.8	-943.4	341.6	311.2	30.42	11.231	
7,200.0	7,119.6	7,251.9	7,116.6	21.5	26.0	-36.24	-891.2	-944.1	341.7	311.0	30.72	11.122	
7,300.0	7,219.6	7,350.9	7,215.6	21.6	26.1	-36.23	-891.9	-945.2	341.7	310.7	31.03	11.014	
7,400.0	7,319.6	7,450.9	7,315.6	21.8	26.2	-36.23	-892.6	-946.5	341.7	310.4	31.33	10.907	
7,500.0	7,419.6	7,550.9	7,415.6	21.9	26.3	-36.23	-893.3	-947.7	341.7	310.1	31.64	10.801	
7,600.0	7,519.6	7,650.9	7,515.6	22.0	26.5	-36.23	-894.0	-949.0	341.7	309.8	31.94	10.698	
7,700.0	7,619.5	7,750.9	7,615.6	22.1	26.6	-36.23	-894.7	-950.2	341.7	309.5	32.25	10.596	
7,800.0	7,719.5	7,850.9	7,715.6	22.3	26.7	-36.23	-895.5	-951.5	341.7	309.2	32.56	10.496	
7,900.0	7,819.5	7,950.9	7,815.6	22.4	26.8	-36.23	-896.2	-952.7	341.7	308.9	32.87	10.397	
8,000.0	7,919.5	8,050.9	7,915.5	22.5	26.9	-36.23	-896.9	-954.0	341.7	308.6	33.18	10.300	
8,100.0	8,019.5	8,150.9	8,015.5	22.6	27.0	-36.24	-897.6	-955.2	341.7	308.2	33.49	10.205	
8,200.0	8,119.5	8,250.9	8,115.5	22.8	27.1	-36.24	-898.3	-956.4	341.7	307.9	33.80	10.111	
8,300.0	8,219.5	8,350.9	8,215.5	22.9	27.2	-36.24	-899.1	-957.7	341.7	307.6	34.11	10.018	
8,400.0	8,319.5	8,450.9	8,315.5	23.0	27.4	-36.24	-899.8	-958.9	341.7	307.3	34.42	9.927	
8,500.0	8,419.5	8,550.9	8,415.5	23.2	27.5	-36.24	-900.5	-960.2	341.7	307.0	34.74	9.837	
8,600.0	8,519.5	8,650.9	8,515.5	23.3	27.6	-36.24	-901.2	-961.4	341.7	306.7	35.05	9.749	
8,700.0	8,619.4	8,750.9	8,615.5	23.4	27.7	-36.24	-901.9	-962.7	341.7	306.4	35.37	9.663	
8,800.0	8,719.4	8,850.9	8,715.5	23.6	27.8	-36.24	-902.7	-963.9	341.7	306.1	35.68	9.577	
8,900.0	8,819.4	8,950.9	8,815.5	23.7	27.9	-36.24	-903.4	-965.2	341.7	305.7	36.00	9.493	
9,000.0	8,919.4	9,050.9	8,915.4	23.8	28.0	-36.24	-904.1	-966.4	341.7	305.4	36.32	9.410	
9,100.0	9,019.4	9,150.9	9,015.4	24.0	28.2	-36.24	-904.8	-967.7	341.8	305.1	36.63	9.329	
9,200.0	9,119.4	9,250.9	9,115.4	24.1	28.3	-36.24	-905.5	-968.9	341.8	304.8	36.95	9.248	
9,300.0	9,219.4	9,350.9	9,215.4	24.2	28.4	-36.24	-906.3	-970.1	341.8	304.5	37.27	9.169	
9,400.0	9,319.4	9,450.9	9,315.4	24.4	28.5	-36.24	-907.0	-971.4	341.8	304.2	37.59	9.092	
9,500.0	9,419.4	9,550.9	9,415.4	24.5	28.6	-36.24	-907.7	-972.6	341.8	303.8	37.91	9.015	
9,600.0	9,519.3	9,650.9	9,515.4	24.6	28.8	-36.24	-908.4	-973.9	341.8	303.5	38.23	8.939	
9,700.0	9,619.3	9,750.9	9,615.4	24.8	28.9	-36.24	-909.1	-975.1	341.8	303.2	38.55	8.865	
9,800.0	9,719.3	9,850.9	9,715.4	24.9	29.0	-36.24	-909.9	-976.4	341.8	302.9	38.87	8.792	
9,900.0	9,819.3	9,950.9	9,815.3	25.0	29.1	-36.24	-910.6	-977.6	341.8	302.6	39.20	8.720	
9,911.7	9,831.0	9,951.6	9,816.0	25.1	29.1	-36.24	-910.6	-977.6	341.9	302.7	39.22	8.720	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM07C B21 696 - DD - Plan #1

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	-150.44	-25.9	-14.7	29.7				
100.0	100.0	100.0	100.0	0.1	0.1	-150.44	-25.9	-14.7	29.7	29.4	0.30	100.222	
200.0	200.0	200.0	200.0	0.3	0.3	-150.44	-25.9	-14.7	29.7	29.1	0.65	46.048	
300.0	300.0	300.0	300.0	0.5	0.5	-150.44	-25.9	-14.7	29.7	28.7	0.99	29.891	CC, ES
400.0	400.0	399.0	398.9	0.7	0.7	-149.86	-27.2	-15.8	31.4	30.1	1.34	23.384	
500.0	500.0	497.7	497.5	0.8	0.9	-148.44	-31.1	-19.1	36.5	34.8	1.70	21.443	
600.0	600.0	596.1	595.5	1.0	1.1	-21.88	-37.5	-24.6	43.4	41.4	2.04	21.334	
700.0	699.8	694.2	693.0	1.2	1.3	-22.16	-46.5	-32.2	50.5	48.1	2.39	21.182	
800.0	799.5	792.1	789.7	1.4	1.6	-23.17	-58.0	-41.9	57.8	55.0	2.74	21.088	
900.0	898.7	889.8	885.6	1.7	2.0	-24.65	-72.0	-53.8	65.2	62.1	3.10	20.996	
1,000.0	997.5	987.2	980.6	1.9	2.4	-26.41	-88.4	-67.7	72.9	69.4	3.49	20.879	
1,100.0	1,096.1	1,085.2	1,075.5	2.2	2.8	-27.70	-107.2	-83.6	82.8	78.9	3.90	21.217	
1,200.0	1,194.7	1,184.7	1,171.6	2.5	3.3	-28.64	-126.6	-100.1	93.3	88.9	4.33	21.547	
1,300.0	1,293.3	1,284.1	1,267.7	2.9	3.7	-29.40	-146.1	-116.6	103.7	99.0	4.76	21.778	
1,400.0	1,392.0	1,383.5	1,363.9	3.2	4.2	-30.01	-165.5	-133.1	114.2	109.0	5.21	21.940	
1,500.0	1,490.6	1,483.0	1,460.0	3.5	4.7	-30.52	-185.0	-149.6	124.7	119.0	5.65	22.052	
1,600.0	1,589.2	1,582.4	1,556.1	3.8	5.1	-30.95	-204.4	-166.1	135.2	129.1	6.11	22.130	
1,700.0	1,687.8	1,681.9	1,652.2	4.2	5.6	-31.32	-223.8	-182.6	145.7	139.1	6.57	22.183	
1,800.0	1,786.4	1,781.3	1,748.3	4.5	6.1	-31.64	-243.3	-199.0	156.2	149.2	7.03	22.219	
1,900.0	1,885.1	1,880.8	1,844.5	4.8	6.6	-31.92	-262.7	-215.5	166.7	159.2	7.50	22.242	
2,000.0	1,983.7	1,980.2	1,940.6	5.2	7.0	-32.17	-282.2	-232.0	177.3	169.3	7.96	22.256	
2,100.0	2,082.3	2,079.6	2,036.7	5.5	7.5	-32.39	-301.6	-248.5	187.8	179.3	8.43	22.263	
2,200.0	2,180.9	2,179.1	2,132.8	5.8	8.0	-32.58	-321.1	-265.0	198.3	189.4	8.91	22.264	
2,300.0	2,279.5	2,278.5	2,228.9	6.2	8.5	-32.76	-340.5	-281.5	208.8	199.4	9.38	22.262	
2,400.0	2,378.2	2,378.0	2,325.1	6.5	9.0	-32.92	-359.9	-298.0	219.4	209.5	9.86	22.258	
2,500.0	2,476.8	2,477.4	2,421.2	6.8	9.4	-33.06	-379.4	-314.4	229.9	219.6	10.33	22.251	
2,600.0	2,575.4	2,576.9	2,517.3	7.2	9.9	-33.20	-398.8	-330.9	240.4	229.6	10.81	22.243	
2,700.0	2,674.0	2,676.3	2,613.4	7.5	10.4	-33.32	-418.3	-347.4	251.0	239.7	11.29	22.234	
2,800.0	2,772.6	2,775.7	2,709.5	7.8	10.9	-33.43	-437.7	-363.9	261.5	249.7	11.77	22.224	
2,900.0	2,871.3	2,875.2	2,805.7	8.2	11.4	-33.53	-457.1	-380.4	272.0	259.8	12.25	22.213	
3,000.0	2,969.9	2,974.6	2,901.8	8.5	11.8	-33.62	-476.6	-396.9	282.6	269.8	12.73	22.203	
3,100.0	3,068.5	3,074.1	2,997.9	8.9	12.3	-33.71	-496.0	-413.4	293.1	279.9	13.21	22.192	
3,200.0	3,167.1	3,173.5	3,094.0	9.2	12.8	-33.79	-515.5	-429.8	303.6	289.9	13.69	22.181	
3,300.0	3,265.7	3,273.0	3,190.1	9.5	13.3	-33.87	-534.9	-446.3	314.2	300.0	14.17	22.170	
3,400.0	3,364.4	3,372.4	3,286.3	9.9	13.8	-33.94	-554.4	-462.8	324.7	310.1	14.65	22.160	
3,500.0	3,463.0	3,471.8	3,382.4	10.2	14.3	-34.01	-573.8	-479.3	335.3	320.1	15.14	22.149	
3,600.0	3,561.6	3,571.3	3,478.5	10.5	14.7	-34.07	-593.2	-495.8	345.8	330.2	15.62	22.139	
3,700.0	3,660.2	3,670.7	3,574.6	10.9	15.2	-34.13	-612.7	-512.3	356.3	340.2	16.10	22.128	
3,800.0	3,758.8	3,770.2	3,670.7	11.2	15.7	-34.19	-632.1	-528.8	366.9	350.3	16.59	22.118	
3,900.0	3,857.5	3,869.6	3,766.9	11.6	16.2	-34.24	-651.6	-545.2	377.4	360.3	17.07	22.109	
4,000.0	3,956.1	3,969.0	3,863.0	11.9	16.7	-34.29	-671.0	-561.7	388.0	370.4	17.56	22.099	
4,100.0	4,054.7	4,068.5	3,959.1	12.2	17.1	-34.34	-690.4	-578.2	398.5	380.5	18.04	22.090	
4,200.0	4,153.3	4,167.9	4,055.2	12.6	17.6	-34.38	-709.9	-594.7	409.0	390.5	18.52	22.081	
4,300.0	4,251.9	4,267.4	4,151.3	12.9	18.1	-34.42	-729.3	-611.2	419.6	400.6	19.01	22.072	
4,400.0	4,350.6	4,366.8	4,247.5	13.2	18.6	-34.46	-748.8	-627.7	430.1	410.6	19.49	22.063	
4,500.0	4,449.2	4,466.3	4,343.6	13.6	19.1	-34.50	-768.2	-644.2	440.7	420.7	19.98	22.055	
4,600.0	4,547.8	4,565.7	4,439.7	13.9	19.6	-34.54	-787.7	-660.6	451.2	430.7	20.47	22.047	
4,700.0	4,646.4	4,665.1	4,535.8	14.3	20.0	-34.57	-807.1	-677.1	461.7	440.8	20.95	22.039	
4,800.0	4,745.0	4,764.6	4,631.9	14.6	20.5	-34.61	-826.5	-693.6	472.3	450.8	21.44	22.032	
4,900.0	4,843.7	4,864.0	4,728.1	14.9	21.0	-34.64	-846.0	-710.1	482.8	460.9	21.92	22.024	
5,000.0	4,942.3	4,963.5	4,824.2	15.3	21.5	-34.67	-865.4	-726.6	493.4	471.0	22.41	22.017	
5,100.0	5,040.9	5,062.9	4,920.3	15.6	22.0	-34.70	-884.9	-743.1	503.9	481.0	22.89	22.010	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM07C B21 696 - DD - Plan #1

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	5,139.5	5,162.4	5,016.4	16.0	22.5	-34.73	-904.3	-759.6	514.5	491.1	23.38	22.003	
5,300.0	5,238.1	5,261.8	5,112.5	16.3	22.9	-34.75	-923.8	-776.0	525.0	501.1	23.87	21.996	
5,400.0	5,336.8	5,361.2	5,208.7	16.6	23.4	-34.78	-943.2	-792.5	535.5	511.2	24.35	21.990	
5,500.0	5,435.4	5,460.7	5,304.8	17.0	23.9	-34.81	-962.6	-809.0	546.1	521.2	24.84	21.984	
5,600.0	5,534.0	5,560.1	5,400.9	17.3	24.4	-34.83	-982.1	-825.5	556.6	531.3	25.33	21.978	
5,700.0	5,632.6	5,659.6	5,497.0	17.7	24.9	-34.85	-1,001.5	-842.0	567.2	541.4	25.81	21.972	
5,800.0	5,731.2	5,759.0	5,593.1	18.0	25.4	-34.87	-1,021.0	-858.5	577.7	551.4	26.30	21.966	
5,900.0	5,829.9	5,858.5	5,689.3	18.3	25.8	-34.90	-1,040.4	-875.0	588.3	561.5	26.79	21.960	
6,000.0	5,928.5	5,957.9	5,785.4	18.7	26.3	-34.92	-1,059.8	-891.4	598.8	571.5	27.27	21.955	
6,100.0	6,027.1	6,057.3	5,881.5	19.0	26.8	-34.94	-1,079.3	-907.9	609.3	581.6	27.76	21.950	
6,200.0	6,125.7	6,156.8	5,977.6	19.4	27.3	-34.96	-1,098.7	-924.4	619.9	591.6	28.25	21.944	
6,300.0	6,224.3	6,256.2	6,073.7	19.7	27.8	-34.97	-1,118.2	-940.9	630.4	601.7	28.74	21.939	
6,400.0	6,323.0	6,368.8	6,182.7	20.0	28.3	-35.02	-1,139.7	-959.1	640.5	611.2	29.26	21.892	
6,500.0	6,421.6	6,495.0	6,306.0	20.4	28.8	-35.22	-1,160.2	-976.6	647.0	617.1	29.85	21.671	
6,600.0	6,520.6	6,621.5	6,430.7	20.6	29.2	-35.50	-1,176.7	-990.5	651.2	620.8	30.41	21.416	
6,700.0	6,620.0	6,748.3	6,556.4	20.9	29.5	-35.72	-1,188.9	-1,000.9	654.1	623.3	30.88	21.182	
6,800.0	6,719.7	6,875.2	6,682.9	21.1	29.7	-35.88	-1,196.9	-1,007.6	655.8	624.5	31.28	20.966	
6,900.0	6,819.6	7,002.2	6,809.8	21.2	29.8	-35.98	-1,200.6	-1,010.8	656.2	624.6	31.60	20.764	
6,996.0	6,915.6	7,106.8	6,914.3	21.3	29.9	-39.79	-1,200.9	-1,011.1	655.6	623.8	31.87	20.575	
7,000.0	6,919.6	7,110.7	6,918.3	21.3	29.9	-41.77	-1,200.9	-1,011.1	656.0	624.1	31.86	20.587	
7,100.0	7,019.6	7,208.6	7,016.2	21.4	30.0	-41.76	-1,201.1	-1,011.5	656.1	623.9	32.15	20.410	
7,200.0	7,119.6	7,306.5	7,114.1	21.5	30.1	-41.76	-1,201.6	-1,012.3	656.2	623.7	32.43	20.231	
7,300.0	7,219.6	7,405.0	7,212.5	21.6	30.2	-41.75	-1,202.2	-1,013.4	656.2	623.5	32.73	20.049	
7,400.0	7,319.6	7,505.0	7,312.5	21.8	30.3	-41.75	-1,203.0	-1,014.6	656.2	623.2	33.02	19.871	
7,500.0	7,419.6	7,605.0	7,412.5	21.9	30.4	-41.75	-1,203.7	-1,015.9	656.2	622.9	33.32	19.694	
7,600.0	7,519.6	7,705.0	7,512.5	22.0	30.5	-41.75	-1,204.4	-1,017.1	656.2	622.6	33.62	19.520	
7,700.0	7,619.5	7,805.0	7,612.5	22.1	30.6	-41.76	-1,205.1	-1,018.4	656.2	622.3	33.91	19.349	
7,800.0	7,719.5	7,905.0	7,712.5	22.3	30.7	-41.76	-1,205.8	-1,019.6	656.2	622.0	34.21	19.180	
7,900.0	7,819.5	8,005.0	7,812.5	22.4	30.8	-41.76	-1,206.6	-1,020.9	656.2	621.7	34.51	19.014	
8,000.0	7,919.5	8,105.0	7,912.5	22.5	30.9	-41.76	-1,207.3	-1,022.1	656.2	621.4	34.81	18.849	
8,100.0	8,019.5	8,205.0	8,012.5	22.6	31.0	-41.76	-1,208.0	-1,023.3	656.2	621.1	35.12	18.687	
8,200.0	8,119.5	8,305.0	8,112.4	22.8	31.1	-41.76	-1,208.7	-1,024.6	656.2	620.8	35.42	18.528	
8,300.0	8,219.5	8,405.0	8,212.4	22.9	31.2	-41.76	-1,209.4	-1,025.8	656.2	620.5	35.72	18.370	
8,400.0	8,319.5	8,505.0	8,312.4	23.0	31.3	-41.76	-1,210.2	-1,027.1	656.2	620.2	36.03	18.215	
8,500.0	8,419.5	8,605.0	8,412.4	23.2	31.4	-41.76	-1,210.9	-1,028.3	656.2	619.9	36.33	18.062	
8,600.0	8,519.5	8,705.0	8,512.4	23.3	31.5	-41.76	-1,211.6	-1,029.6	656.2	619.6	36.64	17.912	
8,700.0	8,619.4	8,805.0	8,612.4	23.4	31.6	-41.76	-1,212.3	-1,030.8	656.2	619.3	36.94	17.763	
8,800.0	8,719.4	8,905.0	8,712.4	23.6	31.7	-41.76	-1,213.0	-1,032.0	656.2	619.0	37.25	17.616	
8,900.0	8,819.4	9,005.0	8,812.4	23.7	31.8	-41.76	-1,213.8	-1,033.3	656.2	618.7	37.56	17.472	
9,000.0	8,919.4	9,105.0	8,912.4	23.8	31.9	-41.76	-1,214.5	-1,034.5	656.2	618.4	37.87	17.329	
9,100.0	9,019.4	9,205.0	9,012.4	24.0	32.0	-41.76	-1,215.2	-1,035.8	656.2	618.1	38.18	17.189	
9,200.0	9,119.4	9,305.0	9,112.3	24.1	32.1	-41.76	-1,215.9	-1,037.0	656.2	617.8	38.49	17.050	
9,300.0	9,219.4	9,405.0	9,212.3	24.2	32.2	-41.76	-1,216.6	-1,038.2	656.2	617.4	38.80	16.913	
9,400.0	9,319.4	9,505.0	9,312.3	24.4	32.3	-41.76	-1,217.4	-1,039.5	656.2	617.1	39.11	16.778	
9,500.0	9,419.4	9,605.0	9,412.3	24.5	32.4	-41.76	-1,218.1	-1,040.7	656.2	616.8	39.42	16.646	
9,600.0	9,519.3	9,705.0	9,512.3	24.6	32.6	-41.76	-1,218.8	-1,042.0	656.2	616.5	39.74	16.514	
9,700.0	9,619.3	9,805.0	9,612.3	24.8	32.7	-41.76	-1,219.5	-1,043.2	656.3	616.2	40.05	16.385	
9,800.0	9,719.3	9,905.0	9,712.3	24.9	32.8	-41.76	-1,220.2	-1,044.5	656.3	615.9	40.37	16.258	
9,858.8	9,778.1	9,963.8	9,771.1	25.0	32.8	-41.76	-1,220.7	-1,045.2	656.3	615.7	40.55	16.183	
9,900.0	9,819.3	9,998.7	9,806.0	25.0	32.9	-41.76	-1,220.9	-1,045.6	656.3	615.6	40.67	16.136	
9,911.7	9,831.0	9,998.7	9,806.0	25.1	32.9	-41.76	-1,220.9	-1,045.6	656.5	615.8	40.69	16.134	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM07D B21 696 - DD - Plan #1

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	-150.54	-17.5	-9.9	20.1				
100.0	100.0	100.0	100.0	0.1	0.1	-150.54	-17.5	-9.9	20.1	19.8	0.30	67.674	
200.0	200.0	200.0	200.0	0.3	0.3	-150.54	-17.5	-9.9	20.1	19.4	0.65	31.094	CC
300.0	300.0	299.9	299.9	0.5	0.5	-155.44	-18.5	-8.4	20.3	19.3	1.00	20.417	ES
400.0	400.0	399.1	399.0	0.7	0.7	-163.47	-21.9	-6.5	22.9	21.6	1.34	17.053	SF
500.0	500.0	498.0	497.7	0.8	0.9	-167.32	-28.3	-6.4	29.1	27.4	1.70	17.107	
600.0	600.0	596.6	595.8	1.0	1.1	-43.95	-37.5	-8.0	37.3	35.3	2.04	18.272	
700.0	699.8	694.9	693.3	1.2	1.4	-46.80	-49.5	-11.4	46.3	43.9	2.39	19.365	
800.0	799.5	792.8	789.9	1.4	1.7	-49.77	-64.3	-16.5	56.1	53.4	2.76	20.347	
900.0	898.7	890.3	885.6	1.7	2.0	-52.69	-81.9	-23.4	66.9	63.7	3.17	21.105	
1,000.0	997.5	987.4	980.2	1.9	2.4	-55.46	-102.1	-31.9	78.8	75.1	3.65	21.602	
1,100.0	1,096.1	1,084.2	1,073.7	2.2	2.9	-56.94	-124.9	-42.0	92.9	88.8	4.16	22.343	
1,200.0	1,194.7	1,183.0	1,168.8	2.5	3.4	-57.61	-149.4	-53.1	108.3	103.6	4.69	23.061	
1,300.0	1,293.3	1,281.8	1,263.9	2.9	3.8	-58.12	-173.8	-64.2	123.6	118.4	5.25	23.561	
1,400.0	1,392.0	1,380.6	1,359.0	3.2	4.3	-58.51	-198.3	-75.3	139.0	133.2	5.81	23.917	
1,500.0	1,490.6	1,479.4	1,454.1	3.5	4.8	-58.82	-222.8	-86.4	154.4	148.0	6.39	24.177	
1,600.0	1,589.2	1,578.3	1,549.2	3.8	5.3	-59.08	-247.2	-97.5	169.8	162.8	6.97	24.371	
1,700.0	1,687.8	1,677.1	1,644.3	4.2	5.8	-59.30	-271.7	-108.6	185.2	177.6	7.55	24.518	
1,800.0	1,786.4	1,775.9	1,739.3	4.5	6.3	-59.48	-296.2	-119.7	200.5	192.4	8.14	24.633	
1,900.0	1,885.1	1,874.7	1,834.4	4.8	6.8	-59.63	-320.6	-130.8	215.9	207.2	8.73	24.722	
2,000.0	1,983.7	1,973.5	1,929.5	5.2	7.3	-59.77	-345.1	-141.9	231.3	222.0	9.33	24.793	
2,100.0	2,082.3	2,072.3	2,024.6	5.5	7.8	-59.89	-369.5	-153.0	246.7	236.8	9.93	24.850	
2,200.0	2,180.9	2,171.1	2,119.7	5.8	8.3	-59.99	-394.0	-164.1	262.1	251.6	10.53	24.897	
2,300.0	2,279.5	2,269.9	2,214.8	6.2	8.8	-60.08	-418.5	-175.2	277.5	266.4	11.13	24.935	
2,400.0	2,378.2	2,368.7	2,309.9	6.5	9.3	-60.17	-442.9	-186.3	292.9	281.2	11.73	24.966	
2,500.0	2,476.8	2,467.5	2,404.9	6.8	9.8	-60.24	-467.4	-197.4	308.3	295.9	12.34	24.993	
2,600.0	2,575.4	2,566.3	2,500.0	7.2	10.3	-60.31	-491.8	-208.5	323.7	310.7	12.94	25.014	
2,700.0	2,674.0	2,665.1	2,595.1	7.5	10.8	-60.37	-516.3	-219.6	339.1	325.5	13.55	25.033	
2,800.0	2,772.6	2,763.9	2,690.2	7.8	11.3	-60.43	-540.8	-230.7	354.5	340.3	14.15	25.049	
2,900.0	2,871.3	2,862.8	2,785.3	8.2	11.8	-60.48	-565.2	-241.8	369.9	355.1	14.76	25.062	
3,000.0	2,969.9	2,961.6	2,880.4	8.5	12.3	-60.53	-589.7	-252.9	385.3	369.9	15.37	25.073	
3,100.0	3,068.5	3,060.4	2,975.5	8.9	12.8	-60.57	-614.1	-264.0	400.7	384.7	15.97	25.083	
3,200.0	3,167.1	3,159.2	3,070.6	9.2	13.3	-60.61	-638.6	-275.1	416.1	399.5	16.58	25.091	
3,300.0	3,265.7	3,258.0	3,165.6	9.5	13.8	-60.65	-663.1	-286.2	431.4	414.3	17.19	25.098	
3,400.0	3,364.4	3,356.8	3,260.7	9.9	14.3	-60.68	-687.5	-297.3	446.8	429.0	17.80	25.105	
3,500.0	3,463.0	3,455.6	3,355.8	10.2	14.8	-60.72	-712.0	-308.5	462.2	443.8	18.41	25.110	
3,600.0	3,561.6	3,554.4	3,450.9	10.5	15.3	-60.75	-736.4	-319.6	477.6	458.6	19.02	25.115	
3,700.0	3,660.2	3,653.2	3,546.0	10.9	15.8	-60.78	-760.9	-330.7	493.0	473.4	19.63	25.119	
3,800.0	3,758.8	3,752.0	3,641.1	11.2	16.3	-60.80	-785.4	-341.8	508.4	488.2	20.24	25.122	
3,900.0	3,857.5	3,850.8	3,736.2	11.6	16.8	-60.83	-809.8	-352.9	523.8	503.0	20.85	25.125	
4,000.0	3,956.1	3,949.6	3,831.2	11.9	17.3	-60.85	-834.3	-364.0	539.2	517.8	21.46	25.128	
4,100.0	4,054.7	4,048.4	3,926.3	12.2	17.8	-60.87	-858.7	-375.1	554.6	532.6	22.07	25.130	
4,200.0	4,153.3	4,147.2	4,021.4	12.6	18.3	-60.90	-883.2	-386.2	570.0	547.3	22.68	25.132	
4,300.0	4,251.9	4,246.1	4,116.5	12.9	18.8	-60.92	-907.7	-397.3	585.4	562.1	23.29	25.134	
4,400.0	4,350.6	4,344.9	4,211.6	13.2	19.3	-60.94	-932.1	-408.4	600.8	576.9	23.90	25.135	
4,500.0	4,449.2	4,443.7	4,306.7	13.6	19.8	-60.95	-956.6	-419.5	616.2	591.7	24.51	25.137	
4,600.0	4,547.8	4,542.5	4,401.8	13.9	20.3	-60.97	-981.0	-430.6	631.6	606.5	25.13	25.138	
4,700.0	4,646.4	4,641.3	4,496.8	14.3	20.8	-60.99	-1,005.5	-441.7	647.0	621.3	25.74	25.139	
4,800.0	4,745.0	4,740.1	4,591.9	14.6	21.3	-61.00	-1,030.0	-452.8	662.4	636.1	26.35	25.139	
4,900.0	4,843.7	4,838.9	4,687.0	14.9	21.8	-61.02	-1,054.4	-463.9	677.8	650.8	26.96	25.140	
5,000.0	4,942.3	4,937.7	4,782.1	15.3	22.3	-61.03	-1,078.9	-475.0	693.2	665.6	27.57	25.141	
5,100.0	5,040.9	5,036.5	4,877.2	15.6	22.8	-61.05	-1,103.3	-486.1	708.6	680.4	28.19	25.141	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM07D B21 696 - DD - Plan #1

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	5,139.5	5,135.3	4,972.3	16.0	23.3	-61.06	-1,127.8	-497.2	724.0	695.2	28.80	25.141	
5,300.0	5,238.1	5,234.1	5,067.4	16.3	23.8	-61.07	-1,152.3	-508.3	739.4	710.0	29.41	25.142	
5,400.0	5,336.8	5,332.9	5,162.4	16.6	24.3	-61.08	-1,176.7	-519.4	754.8	724.8	30.02	25.142	
5,500.0	5,435.4	5,431.7	5,257.5	17.0	24.8	-61.10	-1,201.2	-530.5	770.2	739.6	30.63	25.142	
5,600.0	5,534.0	5,530.5	5,352.6	17.3	25.3	-61.11	-1,225.7	-541.6	785.6	754.3	31.25	25.142	
5,700.0	5,632.6	5,629.4	5,447.7	17.7	25.8	-61.12	-1,250.1	-552.7	801.0	769.1	31.86	25.142	
5,800.0	5,731.2	5,728.2	5,542.8	18.0	26.3	-61.13	-1,274.6	-563.8	816.4	783.9	32.47	25.142	
5,900.0	5,829.9	5,827.0	5,637.9	18.3	26.8	-61.14	-1,299.0	-574.9	831.8	798.7	33.08	25.142	
6,000.0	5,928.5	5,925.8	5,733.0	18.7	27.3	-61.15	-1,323.5	-586.0	847.2	813.5	33.70	25.142	
6,100.0	6,027.1	6,024.6	5,828.0	19.0	27.8	-61.16	-1,348.0	-597.1	862.6	828.3	34.31	25.142	
6,200.0	6,125.7	6,123.4	5,923.1	19.4	28.3	-61.17	-1,372.4	-608.2	878.0	843.1	34.92	25.142	
6,300.0	6,224.3	6,222.2	6,018.2	19.7	28.8	-61.17	-1,396.9	-619.3	893.4	857.8	35.53	25.142	
6,400.0	6,323.0	6,332.9	6,124.8	20.0	29.4	-61.20	-1,424.0	-631.6	908.6	872.4	36.18	25.113	
6,500.0	6,421.6	6,469.0	6,257.2	20.4	29.9	-61.41	-1,453.0	-644.7	920.7	883.8	36.93	24.929	
6,600.0	6,520.6	6,606.0	6,391.7	20.6	30.4	-61.80	-1,476.3	-655.3	929.9	892.2	37.64	24.702	
6,700.0	6,620.0	6,743.7	6,528.0	20.9	30.8	-62.10	-1,493.9	-663.3	936.7	898.4	38.23	24.501	
6,800.0	6,719.7	6,881.8	6,665.5	21.1	31.0	-62.31	-1,505.5	-668.6	941.0	902.3	38.69	24.319	
6,900.0	6,819.6	7,020.1	6,803.7	21.2	31.2	-62.43	-1,511.1	-671.1	943.0	903.9	39.04	24.156	
7,000.0	6,919.6	7,135.1	6,918.7	21.3	31.3	-68.22	-1,511.6	-671.4	943.0	903.7	39.27	24.012	
7,100.0	7,019.6	7,233.6	7,017.2	21.4	31.3	-68.22	-1,511.9	-671.8	943.0	903.5	39.51	23.871	
7,200.0	7,119.6	7,332.1	7,115.7	21.5	31.4	-68.22	-1,512.3	-672.5	943.1	903.3	39.75	23.723	
7,300.0	7,219.6	7,431.0	7,214.5	21.6	31.5	-68.21	-1,512.9	-673.7	943.1	903.1	40.01	23.571	
7,400.0	7,319.6	7,531.0	7,314.5	21.8	31.6	-68.21	-1,513.7	-674.9	943.1	902.8	40.27	23.418	
7,500.0	7,419.6	7,631.0	7,414.5	21.9	31.7	-68.21	-1,514.4	-676.2	943.1	902.6	40.53	23.267	
7,600.0	7,519.6	7,731.0	7,514.5	22.0	31.8	-68.21	-1,515.1	-677.4	943.1	902.3	40.80	23.117	
7,700.0	7,619.5	7,831.0	7,614.5	22.1	31.9	-68.21	-1,515.8	-678.6	943.1	902.0	41.06	22.969	
7,800.0	7,719.5	7,931.0	7,714.5	22.3	32.0	-68.21	-1,516.5	-679.9	943.1	901.8	41.33	22.821	
7,900.0	7,819.5	8,031.0	7,814.5	22.4	32.1	-68.21	-1,517.3	-681.1	943.1	901.5	41.59	22.675	
8,000.0	7,919.5	8,131.0	7,914.5	22.5	32.2	-68.21	-1,518.0	-682.4	943.1	901.3	41.86	22.529	
8,100.0	8,019.5	8,231.0	8,014.4	22.6	32.3	-68.21	-1,518.7	-683.6	943.1	901.0	42.13	22.385	
8,200.0	8,119.5	8,331.0	8,114.4	22.8	32.4	-68.21	-1,519.4	-684.9	943.1	900.7	42.40	22.243	
8,300.0	8,219.5	8,431.0	8,214.4	22.9	32.4	-68.21	-1,520.1	-686.1	943.1	900.5	42.67	22.101	
8,400.0	8,319.5	8,531.0	8,314.4	23.0	32.5	-68.21	-1,520.9	-687.3	943.1	900.2	42.95	21.961	
8,500.0	8,419.5	8,631.0	8,414.4	23.2	32.6	-68.21	-1,521.6	-688.6	943.1	899.9	43.22	21.821	
8,600.0	8,519.5	8,731.0	8,514.4	23.3	32.7	-68.21	-1,522.3	-689.8	943.1	899.6	43.50	21.683	
8,700.0	8,619.4	8,831.0	8,614.4	23.4	32.8	-68.21	-1,523.0	-691.1	943.1	899.4	43.77	21.546	
8,800.0	8,719.4	8,931.0	8,714.4	23.6	32.9	-68.22	-1,523.7	-692.3	943.1	899.1	44.05	21.411	
8,900.0	8,819.4	9,031.0	8,814.4	23.7	33.0	-68.22	-1,524.5	-693.5	943.1	898.8	44.33	21.276	
9,000.0	8,919.4	9,131.0	8,914.4	23.8	33.1	-68.22	-1,525.2	-694.8	943.1	898.5	44.61	21.143	
9,100.0	9,019.4	9,231.0	9,014.3	24.0	33.2	-68.22	-1,525.9	-696.0	943.2	898.3	44.89	21.011	
9,200.0	9,119.4	9,331.0	9,114.3	24.1	33.3	-68.22	-1,526.6	-697.3	943.2	898.0	45.17	20.880	
9,300.0	9,219.4	9,431.0	9,214.3	24.2	33.5	-68.22	-1,527.3	-698.5	943.2	897.7	45.45	20.750	
9,400.0	9,319.4	9,531.0	9,314.3	24.4	33.6	-68.22	-1,528.0	-699.8	943.2	897.4	45.74	20.622	
9,500.0	9,419.4	9,631.0	9,414.3	24.5	33.7	-68.22	-1,528.8	-701.0	943.2	897.1	46.02	20.494	
9,600.0	9,519.3	9,731.0	9,514.3	24.6	33.8	-68.22	-1,529.5	-702.2	943.2	896.9	46.31	20.368	
9,700.0	9,619.3	9,831.0	9,614.3	24.8	33.9	-68.22	-1,530.2	-703.5	943.2	896.6	46.59	20.243	
9,800.0	9,719.3	9,931.0	9,714.3	24.9	34.0	-68.22	-1,530.9	-704.7	943.2	896.3	46.88	20.119	
9,859.5	9,778.9	9,990.5	9,773.8	25.0	34.0	-68.22	-1,531.4	-705.5	943.2	896.1	47.05	20.046	
9,900.0	9,819.3	10,027.7	9,811.0	25.0	34.1	-68.22	-1,531.6	-705.9	943.2	896.0	47.16	19.998	
9,911.7	9,831.0	10,027.7	9,811.0	25.1	34.1	-68.22	-1,531.6	-705.9	943.3	896.1	47.18	19.994	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM08B B21 696 - DD - Plan #1

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	29.46	17.5	9.9	20.1				
100.0	100.0	100.0	100.0	0.1	0.1	29.46	17.5	9.9	20.1	19.8	0.30	67.674	
200.0	200.0	200.0	200.0	0.3	0.3	29.46	17.5	9.9	20.1	19.4	0.65	31.094	
300.0	300.0	300.0	300.0	0.5	0.5	29.46	17.5	9.9	20.1	19.1	0.99	20.184	
400.0	400.0	400.0	400.0	0.7	0.7	29.46	17.5	9.9	20.1	18.7	1.34	14.941	
500.0	500.0	500.0	500.0	0.8	0.8	29.46	17.5	9.9	20.1	18.4	1.69	11.860	CC, ES
600.0	600.0	600.0	600.0	1.0	1.0	157.07	17.5	9.9	21.7	19.6	2.04	10.617	SF
700.0	699.8	700.3	700.3	1.2	1.2	164.68	15.8	10.4	25.6	23.2	2.39	10.712	
800.0	799.5	800.4	800.2	1.4	1.4	176.89	10.9	12.2	32.0	29.2	2.74	11.651	
900.0	898.7	899.8	899.3	1.7	1.6	-170.94	2.7	15.0	42.1	39.0	3.12	13.516	
1,000.0	997.5	998.5	997.2	1.9	1.8	-161.15	-8.7	18.9	56.7	53.2	3.54	16.015	
1,100.0	1,096.1	1,096.4	1,093.9	2.2	2.1	-153.20	-23.1	23.9	73.6	69.6	4.03	18.251	
1,200.0	1,194.7	1,194.3	1,190.2	2.5	2.4	-146.99	-39.4	29.5	92.0	87.4	4.56	20.172	
1,300.0	1,293.3	1,292.2	1,286.6	2.9	2.7	-142.84	-55.7	35.2	111.0	105.9	5.10	21.764	
1,400.0	1,392.0	1,390.1	1,383.0	3.2	3.0	-139.92	-72.1	40.8	130.5	124.8	5.65	23.082	
1,500.0	1,490.6	1,488.0	1,479.3	3.5	3.3	-137.76	-88.4	46.5	150.2	143.9	6.21	24.179	
1,600.0	1,589.2	1,585.9	1,575.7	3.8	3.7	-136.10	-104.8	52.1	170.0	163.2	6.77	25.101	
1,700.0	1,687.8	1,683.8	1,672.1	4.2	4.0	-134.78	-121.1	57.8	190.0	182.6	7.34	25.884	
1,800.0	1,786.4	1,781.7	1,768.4	4.5	4.3	-133.72	-137.5	63.4	210.0	202.1	7.91	26.555	
1,900.0	1,885.1	1,879.6	1,864.8	4.8	4.7	-132.84	-153.8	69.1	230.1	221.6	8.48	27.136	
2,000.0	1,983.7	1,977.5	1,961.1	5.2	5.0	-132.11	-170.2	74.7	250.2	241.2	9.05	27.644	
2,100.0	2,082.3	2,075.4	2,057.5	5.5	5.3	-131.48	-186.5	80.4	270.4	260.8	9.63	28.090	
2,200.0	2,180.9	2,173.3	2,153.9	5.8	5.7	-130.94	-202.9	86.0	290.6	280.4	10.20	28.485	
2,300.0	2,279.5	2,271.2	2,250.2	6.2	6.0	-130.47	-219.2	91.7	310.8	300.0	10.78	28.838	
2,400.0	2,378.2	2,369.1	2,346.6	6.5	6.3	-130.06	-235.6	97.4	331.1	319.7	11.36	29.154	
2,500.0	2,476.8	2,467.0	2,443.0	6.8	6.7	-129.69	-251.9	103.0	351.3	339.4	11.93	29.439	
2,600.0	2,575.4	2,564.9	2,539.3	7.2	7.0	-129.37	-268.3	108.7	371.6	359.1	12.51	29.697	
2,700.0	2,674.0	2,662.8	2,635.7	7.5	7.4	-129.07	-284.7	114.3	391.8	378.8	13.09	29.932	
2,800.0	2,772.6	2,760.7	2,732.1	7.8	7.7	-128.81	-301.0	120.0	412.1	398.5	13.67	30.146	
2,900.0	2,871.3	2,858.6	2,828.4	8.2	8.1	-128.57	-317.4	125.6	432.4	418.2	14.25	30.343	
3,000.0	2,969.9	2,956.5	2,924.8	8.5	8.4	-128.36	-333.7	131.3	452.7	437.9	14.83	30.524	
3,100.0	3,068.5	3,054.4	3,021.2	8.9	8.7	-128.16	-350.1	136.9	473.0	457.6	15.41	30.691	
3,200.0	3,167.1	3,152.3	3,117.5	9.2	9.1	-127.98	-366.4	142.6	493.3	477.3	15.99	30.846	
3,300.0	3,265.7	3,250.3	3,213.9	9.5	9.4	-127.81	-382.8	148.2	513.6	497.1	16.57	30.990	
3,400.0	3,364.4	3,348.2	3,310.2	9.9	9.8	-127.65	-399.1	153.9	534.0	516.8	17.16	31.124	
3,500.0	3,463.0	3,446.1	3,406.6	10.2	10.1	-127.51	-415.5	159.5	554.3	536.5	17.74	31.249	
3,600.0	3,561.6	3,544.0	3,503.0	10.5	10.5	-127.38	-431.8	165.2	574.6	556.3	18.32	31.365	
3,700.0	3,660.2	3,641.9	3,599.3	10.9	10.8	-127.25	-448.2	170.8	594.9	576.0	18.90	31.475	
3,800.0	3,758.8	3,739.8	3,695.7	11.2	11.2	-127.14	-464.5	176.5	615.3	595.8	19.48	31.578	
3,900.0	3,857.5	3,837.7	3,792.1	11.6	11.5	-127.03	-480.9	182.1	635.6	615.5	20.07	31.674	
4,000.0	3,956.1	3,935.6	3,888.4	11.9	11.9	-126.93	-497.2	187.8	655.9	635.3	20.65	31.766	
4,100.0	4,054.7	4,033.5	3,984.8	12.2	12.2	-126.83	-513.6	193.4	676.2	655.0	21.23	31.852	
4,200.0	4,153.3	4,131.4	4,081.2	12.6	12.5	-126.74	-529.9	199.1	696.6	674.8	21.81	31.933	
4,300.0	4,251.9	4,229.3	4,177.5	12.9	12.9	-126.65	-546.3	204.7	716.9	694.5	22.40	32.010	
4,400.0	4,350.6	4,327.2	4,273.9	13.2	13.2	-126.57	-562.6	210.4	737.3	714.3	22.98	32.083	
4,500.0	4,449.2	4,425.1	4,370.2	13.6	13.6	-126.50	-579.0	216.0	757.6	734.0	23.56	32.153	
4,600.0	4,547.8	4,523.0	4,466.6	13.9	13.9	-126.43	-595.3	221.7	777.9	753.8	24.15	32.219	
4,700.0	4,646.4	4,620.9	4,563.0	14.3	14.3	-126.36	-611.7	227.3	798.3	773.6	24.73	32.282	
4,800.0	4,745.0	4,718.8	4,659.3	14.6	14.6	-126.29	-628.0	233.0	818.6	793.3	25.31	32.342	
4,900.0	4,843.7	4,816.7	4,755.7	14.9	15.0	-126.23	-644.4	238.6	839.0	813.1	25.90	32.399	
5,000.0	4,942.3	4,914.6	4,852.1	15.3	15.3	-126.17	-660.7	244.3	859.3	832.8	26.48	32.453	
5,100.0	5,040.9	5,012.5	4,948.4	15.6	15.7	-126.12	-677.1	250.0	879.7	852.6	27.06	32.506	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM08B B21 696 - DD - Plan #1

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	5,139.5	5,110.4	5,044.8	16.0	16.0	-126.06	-693.4	255.6	900.0	872.4	27.65	32.555	
5,300.0	5,238.1	5,208.3	5,141.2	16.3	16.4	-126.01	-709.8	261.3	920.4	892.1	28.23	32.603	
5,400.0	5,336.8	5,306.2	5,237.5	16.6	16.7	-125.96	-726.1	266.9	940.7	911.9	28.81	32.649	
5,500.0	5,435.4	5,404.2	5,333.9	17.0	17.0	-125.91	-742.5	272.6	961.1	931.7	29.40	32.693	
5,600.0	5,534.0	5,502.1	5,430.3	17.3	17.4	-125.87	-758.8	278.2	981.4	951.4	29.98	32.736	
5,700.0	5,632.6	5,600.0	5,526.6	17.7	17.7	-125.83	-775.2	283.9	1,001.8	971.2	30.56	32.776	
5,800.0	5,731.2	5,697.9	5,623.0	18.0	18.1	-125.78	-791.5	289.5	1,022.1	991.0	31.15	32.816	
5,900.0	5,829.9	5,795.8	5,719.3	18.3	18.4	-125.74	-807.9	295.2	1,042.5	1,010.7	31.73	32.853	
6,000.0	5,928.5	5,893.7	5,815.7	18.7	18.8	-125.71	-824.2	300.8	1,062.8	1,030.5	32.31	32.889	
6,100.0	6,027.1	5,991.6	5,912.1	19.0	19.1	-125.67	-840.6	306.5	1,083.2	1,050.3	32.90	32.924	
6,200.0	6,125.7	6,089.5	6,008.4	19.4	19.5	-125.63	-857.0	312.1	1,103.5	1,070.0	33.48	32.958	
6,300.0	6,224.3	6,187.4	6,104.8	19.7	19.8	-125.60	-873.3	317.8	1,123.9	1,089.8	34.07	32.991	
6,400.0	6,323.0	6,285.3	6,201.2	20.0	20.2	-125.57	-889.7	323.4	1,144.2	1,109.6	34.65	33.022	
6,500.0	6,421.6	6,383.2	6,297.5	20.4	20.5	-125.58	-906.0	329.1	1,164.6	1,129.3	35.24	33.044	
6,600.0	6,520.6	6,484.5	6,397.2	20.6	20.9	-125.77	-922.9	334.9	1,183.6	1,147.8	35.85	33.017	
6,700.0	6,620.0	6,616.5	6,527.7	20.9	21.2	-125.82	-941.6	341.4	1,199.0	1,162.6	36.43	32.911	
6,800.0	6,719.7	6,750.0	6,660.5	21.1	21.5	-125.85	-954.6	345.9	1,209.6	1,172.7	36.90	32.779	
6,900.0	6,819.6	6,884.5	6,794.7	21.2	21.8	-125.86	-961.9	348.4	1,215.4	1,178.1	37.26	32.617	
7,000.0	6,919.6	7,010.4	6,920.6	21.3	21.9	-131.61	-963.4	348.9	1,216.5	1,179.0	37.53	32.418	
7,100.0	7,019.6	7,114.0	7,024.3	21.4	22.0	-131.62	-963.6	348.6	1,216.5	1,178.8	37.77	32.209	
7,200.0	7,119.6	7,217.7	7,127.9	21.5	22.1	-131.62	-964.0	347.9	1,216.6	1,178.5	38.02	31.994	
7,300.0	7,219.6	7,320.9	7,231.2	21.6	22.2	-131.62	-964.7	346.7	1,216.6	1,178.3	38.29	31.775	
7,400.0	7,319.6	7,420.9	7,331.1	21.8	22.3	-131.62	-965.4	345.5	1,216.6	1,178.0	38.55	31.560	
7,500.0	7,419.6	7,520.9	7,431.1	21.9	22.4	-131.62	-966.1	344.3	1,216.6	1,177.8	38.81	31.347	
7,600.0	7,519.6	7,620.9	7,531.1	22.0	22.5	-131.62	-966.8	343.0	1,216.6	1,177.5	39.07	31.135	
7,700.0	7,619.5	7,720.9	7,631.1	22.1	22.6	-131.62	-967.6	341.8	1,216.6	1,177.2	39.34	30.926	
7,800.0	7,719.5	7,820.9	7,731.1	22.3	22.7	-131.62	-968.3	340.5	1,216.6	1,177.0	39.60	30.718	
7,900.0	7,819.5	7,920.9	7,831.1	22.4	22.8	-131.62	-969.0	339.3	1,216.6	1,176.7	39.87	30.512	
8,000.0	7,919.5	8,020.9	7,931.1	22.5	22.9	-131.62	-969.7	338.0	1,216.6	1,176.4	40.14	30.307	
8,100.0	8,019.5	8,120.9	8,031.1	22.6	23.1	-131.62	-970.4	336.8	1,216.6	1,176.2	40.41	30.105	
8,200.0	8,119.5	8,220.9	8,131.1	22.8	23.2	-131.62	-971.1	335.6	1,216.6	1,175.9	40.68	29.904	
8,300.0	8,219.5	8,320.9	8,231.1	22.9	23.3	-131.62	-971.9	334.3	1,216.6	1,175.6	40.96	29.705	
8,400.0	8,319.5	8,420.9	8,331.0	23.0	23.4	-131.62	-972.6	333.1	1,216.6	1,175.4	41.23	29.508	
8,500.0	8,419.5	8,520.9	8,431.0	23.2	23.5	-131.62	-973.3	331.8	1,216.6	1,175.1	41.50	29.312	
8,600.0	8,519.5	8,620.9	8,531.0	23.3	23.6	-131.62	-974.0	330.6	1,216.6	1,174.8	41.78	29.119	
8,700.0	8,619.4	8,720.9	8,631.0	23.4	23.7	-131.62	-974.7	329.3	1,216.6	1,174.5	42.06	28.927	
8,800.0	8,719.4	8,820.9	8,731.0	23.6	23.9	-131.62	-975.5	328.1	1,216.6	1,174.3	42.34	28.736	
8,900.0	8,819.4	8,920.9	8,831.0	23.7	24.0	-131.62	-976.2	326.9	1,216.6	1,174.0	42.62	28.548	
9,000.0	8,919.4	9,020.9	8,931.0	23.8	24.1	-131.62	-976.9	325.6	1,216.6	1,173.7	42.90	28.362	
9,100.0	9,019.4	9,120.9	9,031.0	24.0	24.2	-131.62	-977.6	324.4	1,216.6	1,173.4	43.18	28.177	
9,200.0	9,119.4	9,220.9	9,131.0	24.1	24.3	-131.62	-978.3	323.1	1,216.6	1,173.2	43.46	27.994	
9,300.0	9,219.4	9,320.9	9,230.9	24.2	24.4	-131.62	-979.1	321.9	1,216.6	1,172.9	43.74	27.812	
9,400.0	9,319.4	9,420.9	9,330.9	24.4	24.6	-131.62	-979.8	320.6	1,216.6	1,172.6	44.03	27.633	
9,500.0	9,419.4	9,520.9	9,430.9	24.5	24.7	-131.62	-980.5	319.4	1,216.6	1,172.3	44.31	27.455	
9,600.0	9,519.3	9,620.9	9,530.9	24.6	24.8	-131.61	-981.2	318.2	1,216.6	1,172.0	44.60	27.278	
9,700.0	9,619.3	9,720.9	9,630.9	24.8	24.9	-131.61	-981.9	316.9	1,216.6	1,171.7	44.89	27.104	
9,800.0	9,719.3	9,820.9	9,730.9	24.9	25.1	-131.61	-982.7	315.7	1,216.6	1,171.5	45.18	26.931	
9,900.0	9,819.3	9,920.9	9,830.9	25.0	25.2	-131.61	-983.4	314.4	1,216.6	1,171.2	45.46	26.760	
9,901.5	9,820.8	9,922.4	9,832.3	25.0	25.2	-131.61	-983.4	314.4	1,216.6	1,171.2	45.47	26.757	
9,911.7	9,831.0	9,931.0	9,841.0	25.1	25.2	-131.61	-983.4	314.3	1,216.6	1,171.1	45.50	26.741	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM08C B21 696 - DD - Plan #1

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	29.69	26.2	15.0	30.2				
100.0	100.0	100.0	100.0	0.1	0.1	29.69	26.2	15.0	30.2	29.9	0.30	101.746	
200.0	200.0	200.0	200.0	0.3	0.3	29.69	26.2	15.0	30.2	29.5	0.65	46.748	
300.0	300.0	300.0	300.0	0.5	0.5	29.69	26.2	15.0	30.2	29.2	0.99	30.345	
400.0	400.0	400.6	400.6	0.7	0.7	32.34	24.6	15.6	29.1	27.7	1.35	21.618	
500.0	500.0	501.0	500.9	0.8	0.9	41.51	19.6	17.3	26.2	24.5	1.70	15.441	
574.3	574.3	575.3	574.9	1.0	1.0	-179.69	13.8	19.4	24.8	22.8	2.00	12.380	CC, ES
600.0	600.0	601.0	600.4	1.0	1.1	-174.00	11.4	20.3	25.0	22.9	2.11	11.873	SF
700.0	699.8	700.2	698.9	1.2	1.3	-151.83	0.0	24.4	30.3	27.8	2.53	11.987	
800.0	799.5	798.6	796.1	1.4	1.6	-136.63	-14.5	29.6	42.8	39.8	2.97	14.398	
900.0	898.7	895.7	891.4	1.7	2.0	-128.36	-31.9	35.8	60.9	57.5	3.45	17.659	
1,000.0	997.5	992.1	985.4	1.9	2.4	-124.04	-51.9	43.0	83.6	79.6	3.98	21.020	
1,100.0	1,096.1	1,089.1	1,079.9	2.2	2.8	-121.88	-72.8	50.5	107.4	102.9	4.53	23.705	
1,200.0	1,194.7	1,186.2	1,174.4	2.5	3.2	-120.51	-93.6	58.0	131.4	126.3	5.10	25.749	
1,300.0	1,293.3	1,283.2	1,268.9	2.9	3.6	-119.55	-114.5	65.5	155.3	149.7	5.68	27.343	
1,400.0	1,392.0	1,380.3	1,363.4	3.2	4.0	-118.86	-135.3	73.0	179.4	173.1	6.27	28.612	
1,500.0	1,490.6	1,477.3	1,457.8	3.5	4.4	-118.32	-156.2	80.5	203.4	196.5	6.86	29.644	
1,600.0	1,589.2	1,574.4	1,552.3	3.8	4.8	-117.90	-177.0	88.0	227.5	220.0	7.46	30.497	
1,700.0	1,687.8	1,671.4	1,646.8	4.2	5.2	-117.57	-197.9	95.5	251.5	243.5	8.06	31.212	
1,800.0	1,786.4	1,768.5	1,741.3	4.5	5.6	-117.29	-218.7	103.0	275.6	266.9	8.66	31.820	
1,900.0	1,885.1	1,865.5	1,835.8	4.8	6.1	-117.05	-239.6	110.5	299.7	290.4	9.27	32.343	
2,000.0	1,983.7	1,962.6	1,930.3	5.2	6.5	-116.85	-260.4	118.0	323.8	313.9	9.87	32.796	
2,100.0	2,082.3	2,059.6	2,024.8	5.5	6.9	-116.68	-281.3	125.5	347.8	337.4	10.48	33.194	
2,200.0	2,180.9	2,156.7	2,119.3	5.8	7.3	-116.53	-302.2	132.9	371.9	360.8	11.09	33.544	
2,300.0	2,279.5	2,253.8	2,213.8	6.2	7.7	-116.40	-323.0	140.4	396.0	384.3	11.70	33.856	
2,400.0	2,378.2	2,350.8	2,308.2	6.5	8.2	-116.28	-343.9	147.9	420.1	407.8	12.31	34.135	
2,500.0	2,476.8	2,447.9	2,402.7	6.8	8.6	-116.17	-364.7	155.4	444.2	431.3	12.92	34.386	
2,600.0	2,575.4	2,544.9	2,497.2	7.2	9.0	-116.08	-385.6	162.9	468.3	454.8	13.53	34.612	
2,700.0	2,674.0	2,642.0	2,591.7	7.5	9.4	-116.00	-406.4	170.4	492.4	478.2	14.14	34.818	
2,800.0	2,772.6	2,739.0	2,686.2	7.8	9.8	-115.92	-427.3	177.9	516.5	501.7	14.75	35.006	
2,900.0	2,871.3	2,836.1	2,780.7	8.2	10.3	-115.85	-448.1	185.4	540.6	525.2	15.37	35.178	
3,000.0	2,969.9	2,933.1	2,875.2	8.5	10.7	-115.79	-469.0	192.9	564.7	548.7	15.98	35.336	
3,100.0	3,068.5	3,030.2	2,969.7	8.9	11.1	-115.73	-489.8	200.4	588.8	572.2	16.59	35.482	
3,200.0	3,167.1	3,127.2	3,064.1	9.2	11.5	-115.67	-510.7	207.9	612.9	595.7	17.21	35.617	
3,300.0	3,265.7	3,224.3	3,158.6	9.5	12.0	-115.63	-531.6	215.4	637.0	619.1	17.82	35.742	
3,400.0	3,364.4	3,321.3	3,253.1	9.9	12.4	-115.58	-552.4	222.9	661.1	642.6	18.44	35.858	
3,500.0	3,463.0	3,418.4	3,347.6	10.2	12.8	-115.54	-573.3	230.4	685.2	666.1	19.05	35.967	
3,600.0	3,561.6	3,515.4	3,442.1	10.5	13.2	-115.50	-594.1	237.9	709.3	689.6	19.66	36.068	
3,700.0	3,660.2	3,612.5	3,536.6	10.9	13.6	-115.46	-615.0	245.4	733.4	713.1	20.28	36.163	
3,800.0	3,758.8	3,709.5	3,631.1	11.2	14.1	-115.42	-635.8	252.8	757.5	736.6	20.89	36.253	
3,900.0	3,857.5	3,806.6	3,725.6	11.6	14.5	-115.39	-656.7	260.3	781.5	760.0	21.51	36.336	
4,000.0	3,956.1	3,903.6	3,820.0	11.9	14.9	-115.36	-677.5	267.8	805.6	783.5	22.12	36.415	
4,100.0	4,054.7	4,000.7	3,914.5	12.2	15.3	-115.33	-698.4	275.3	829.7	807.0	22.74	36.490	
4,200.0	4,153.3	4,097.7	4,009.0	12.6	15.8	-115.30	-719.2	282.8	853.8	830.5	23.35	36.560	
4,300.0	4,251.9	4,194.8	4,103.5	12.9	16.2	-115.28	-740.1	290.3	877.9	854.0	23.97	36.627	
4,400.0	4,350.6	4,291.8	4,198.0	13.2	16.6	-115.25	-761.0	297.8	902.0	877.5	24.59	36.690	
4,500.0	4,449.2	4,388.9	4,292.5	13.6	17.0	-115.23	-781.8	305.3	926.2	900.9	25.20	36.750	
4,600.0	4,547.8	4,485.9	4,387.0	13.9	17.5	-115.21	-802.7	312.8	950.3	924.4	25.82	36.808	
4,700.0	4,646.4	4,583.0	4,481.5	14.3	17.9	-115.19	-823.5	320.3	974.4	947.9	26.43	36.862	
4,800.0	4,745.0	4,680.0	4,575.9	14.6	18.3	-115.17	-844.4	327.8	998.5	971.4	27.05	36.914	
4,900.0	4,843.7	4,777.1	4,670.4	14.9	18.7	-115.15	-865.2	335.3	1,022.6	994.9	27.66	36.963	
5,000.0	4,942.3	4,874.1	4,764.9	15.3	19.1	-115.13	-886.1	342.8	1,046.7	1,018.4	28.28	37.010	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM08C B21 696 - DD - Plan #1

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	5,040.9	4,971.2	4,859.4	15.6	19.6	-115.11	-906.9	350.3	1,070.8	1,041.9	28.90	37.055	
5,200.0	5,139.5	5,068.3	4,953.9	16.0	20.0	-115.10	-927.8	357.8	1,094.9	1,065.3	29.51	37.098	
5,300.0	5,238.1	5,165.3	5,048.4	16.3	20.4	-115.08	-948.6	365.3	1,119.0	1,088.8	30.13	37.140	
5,400.0	5,336.8	5,262.4	5,142.9	16.6	20.8	-115.06	-969.5	372.7	1,143.1	1,112.3	30.74	37.179	
5,500.0	5,435.4	5,359.4	5,237.4	17.0	21.3	-115.05	-990.4	380.2	1,167.2	1,135.8	31.36	37.217	
5,600.0	5,534.0	5,456.5	5,331.9	17.3	21.7	-115.04	-1,011.2	387.7	1,191.3	1,159.3	31.98	37.254	
5,700.0	5,632.6	5,553.5	5,426.3	17.7	22.1	-115.02	-1,032.1	395.2	1,215.4	1,182.8	32.59	37.289	
5,800.0	5,731.2	5,650.6	5,520.8	18.0	22.5	-115.01	-1,052.9	402.7	1,239.5	1,206.3	33.21	37.323	
5,900.0	5,829.9	5,747.6	5,615.3	18.3	22.9	-115.00	-1,073.8	410.2	1,263.6	1,229.7	33.83	37.355	
6,000.0	5,928.5	5,844.7	5,709.8	18.7	23.4	-114.99	-1,094.6	417.7	1,287.7	1,253.2	34.44	37.386	
6,100.0	6,027.1	5,941.7	5,804.3	19.0	23.8	-114.97	-1,115.5	425.2	1,311.8	1,276.7	35.06	37.417	
6,200.0	6,125.7	6,038.8	5,898.8	19.4	24.2	-114.96	-1,136.3	432.7	1,335.9	1,300.2	35.68	37.446	
6,300.0	6,224.3	6,135.8	5,993.3	19.7	24.6	-114.95	-1,157.2	440.2	1,360.0	1,323.7	36.29	37.474	
6,400.0	6,323.0	6,232.9	6,087.8	20.0	25.1	-114.94	-1,178.0	447.7	1,384.1	1,347.2	36.91	37.501	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM08D B21 696 - DD - Plan #1

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	29.81	43.3	24.8	49.9				
100.0	100.0	100.0	100.0	0.1	0.1	29.81	43.3	24.8	49.9	49.7	0.30	168.341	
200.0	200.0	200.0	200.0	0.3	0.3	29.81	43.3	24.8	49.9	49.3	0.65	77.346	
300.0	300.0	301.0	301.0	0.5	0.5	31.47	41.7	25.5	48.9	47.9	1.00	49.073	
400.0	400.0	401.8	401.6	0.7	0.7	36.89	36.8	27.6	46.1	44.7	1.35	34.184	
500.0	500.0	502.1	501.5	0.8	0.9	47.28	28.7	31.1	42.4	40.7	1.70	24.878	
562.6	562.6	564.4	563.5	1.0	1.1	-177.38	22.1	34.0	41.2	39.1	2.05	20.143	CC, ES
600.0	600.0	601.6	600.3	1.0	1.2	-170.71	17.5	35.9	41.7	39.5	2.21	18.832	
700.0	699.8	700.3	697.7	1.2	1.5	-152.98	3.3	42.0	48.3	45.6	2.68	18.013	SF
800.0	799.5	797.7	793.4	1.4	1.9	-139.55	-13.7	49.3	62.6	59.4	3.15	19.876	
900.0	898.7	893.7	887.0	1.7	2.3	-131.11	-33.5	57.8	83.1	79.5	3.64	22.858	
1,000.0	997.5	988.1	978.2	1.9	2.7	-126.08	-55.6	67.3	108.7	104.5	4.17	26.059	
1,100.0	1,096.1	1,082.2	1,068.4	2.2	3.2	-122.63	-80.2	77.9	137.3	132.5	4.74	28.982	
1,200.0	1,194.7	1,177.7	1,159.8	2.5	3.7	-120.20	-105.6	88.8	166.5	161.2	5.32	31.309	
1,300.0	1,293.3	1,273.1	1,251.1	2.9	4.2	-118.50	-131.0	99.7	195.9	190.0	5.91	33.159	
1,400.0	1,392.0	1,368.5	1,342.5	3.2	4.7	-117.24	-156.3	110.6	225.5	219.0	6.51	34.654	
1,500.0	1,490.6	1,464.0	1,433.9	3.5	5.2	-116.27	-181.7	121.5	255.1	248.0	7.11	35.883	
1,600.0	1,589.2	1,559.4	1,525.2	3.8	5.7	-115.51	-207.1	132.4	284.8	277.0	7.72	36.909	
1,700.0	1,687.8	1,654.8	1,616.6	4.2	6.2	-114.89	-232.5	143.3	314.5	306.1	8.32	37.776	
1,800.0	1,786.4	1,750.3	1,707.9	4.5	6.7	-114.37	-257.8	154.2	344.2	335.3	8.94	38.518	
1,900.0	1,885.1	1,845.7	1,799.3	4.8	7.2	-113.94	-283.2	165.0	374.0	364.4	9.55	39.160	
2,000.0	1,983.7	1,941.1	1,890.6	5.2	7.7	-113.57	-308.6	175.9	403.7	393.6	10.16	39.721	
2,100.0	2,082.3	2,036.6	1,982.0	5.5	8.2	-113.25	-333.9	186.8	433.5	422.7	10.78	40.214	
2,200.0	2,180.9	2,132.0	2,073.3	5.8	8.8	-112.97	-359.3	197.7	463.3	451.9	11.40	40.651	
2,300.0	2,279.5	2,227.4	2,164.7	6.2	9.3	-112.73	-384.7	208.6	493.1	481.1	12.02	41.041	
2,400.0	2,378.2	2,322.9	2,256.0	6.5	9.8	-112.52	-410.0	219.5	522.9	510.3	12.63	41.391	
2,500.0	2,476.8	2,418.3	2,347.4	6.8	10.3	-112.32	-435.4	230.4	552.8	539.5	13.25	41.706	
2,600.0	2,575.4	2,513.7	2,438.7	7.2	10.8	-112.15	-460.8	241.3	582.6	568.7	13.87	41.993	
2,700.0	2,674.0	2,609.2	2,530.1	7.5	11.3	-111.99	-486.2	252.2	612.4	597.9	14.49	42.253	
2,800.0	2,772.6	2,704.6	2,621.4	7.8	11.8	-111.85	-511.5	263.1	642.2	627.1	15.11	42.492	
2,900.0	2,871.3	2,800.1	2,712.8	8.2	12.3	-111.72	-536.9	274.0	672.1	656.3	15.74	42.711	
3,000.0	2,969.9	2,895.5	2,804.2	8.5	12.8	-111.61	-562.3	284.9	701.9	685.6	16.36	42.913	
3,100.0	3,068.5	2,990.9	2,895.5	8.9	13.4	-111.50	-587.6	295.8	731.8	714.8	16.98	43.099	
3,200.0	3,167.1	3,086.4	2,986.9	9.2	13.9	-111.40	-613.0	306.7	761.6	744.0	17.60	43.272	
3,300.0	3,265.7	3,181.8	3,078.2	9.5	14.4	-111.30	-638.4	317.6	791.5	773.2	18.22	43.432	
3,400.0	3,364.4	3,277.2	3,169.6	9.9	14.9	-111.22	-663.7	328.5	821.3	802.5	18.85	43.582	
3,500.0	3,463.0	3,372.7	3,260.9	10.2	15.4	-111.14	-689.1	339.4	851.2	831.7	19.47	43.721	
3,600.0	3,561.6	3,468.1	3,352.3	10.5	15.9	-111.06	-714.5	350.3	881.0	860.9	20.09	43.852	
3,700.0	3,660.2	3,563.5	3,443.6	10.9	16.4	-111.00	-739.9	361.1	910.9	890.1	20.71	43.975	
3,800.0	3,758.8	3,659.0	3,535.0	11.2	16.9	-110.93	-765.2	372.0	940.7	919.4	21.34	44.090	
3,900.0	3,857.5	3,754.4	3,626.3	11.6	17.4	-110.87	-790.6	382.9	970.6	948.6	21.96	44.198	
4,000.0	3,956.1	3,849.8	3,717.7	11.9	18.0	-110.81	-816.0	393.8	1,000.4	977.8	22.58	44.301	
4,100.0	4,054.7	3,945.3	3,809.0	12.2	18.5	-110.76	-841.3	404.7	1,030.3	1,007.1	23.21	44.397	
4,200.0	4,153.3	4,040.7	3,900.4	12.6	19.0	-110.71	-866.7	415.6	1,060.1	1,036.3	23.83	44.489	
4,300.0	4,251.9	4,136.1	3,991.7	12.9	19.5	-110.66	-892.1	426.5	1,090.0	1,065.5	24.45	44.575	
4,400.0	4,350.6	4,231.6	4,083.1	13.2	20.0	-110.61	-917.4	437.4	1,119.8	1,094.8	25.08	44.658	
4,500.0	4,449.2	4,327.0	4,174.5	13.6	20.5	-110.57	-942.8	448.3	1,149.7	1,124.0	25.70	44.736	
4,600.0	4,547.8	4,422.4	4,265.8	13.9	21.0	-110.53	-968.2	459.2	1,179.6	1,153.2	26.32	44.810	
4,700.0	4,646.4	4,517.9	4,357.2	14.3	21.5	-110.49	-993.6	470.1	1,209.4	1,182.5	26.95	44.881	
4,800.0	4,745.0	4,613.3	4,448.5	14.6	22.1	-110.45	-1,018.9	481.0	1,239.3	1,211.7	27.57	44.948	
4,900.0	4,843.7	4,708.7	4,539.9	14.9	22.6	-110.42	-1,044.3	491.9	1,269.1	1,240.9	28.20	45.013	
5,000.0	4,942.3	4,804.2	4,631.2	15.3	23.1	-110.38	-1,069.7	502.8	1,299.0	1,270.2	28.82	45.075	

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 OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM08D B21 696 - DD - Plan #1

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	5,040.9	4,899.6	4,722.6	15.6	23.6	-110.35	-1,095.0	513.7	1,328.9	1,299.4	29.44	45.133	
5,200.0	5,139.5	4,995.1	4,813.9	16.0	24.1	-110.32	-1,120.4	524.6	1,358.7	1,328.7	30.07	45.190	
5,300.0	5,238.1	5,090.5	4,905.3	16.3	24.6	-110.29	-1,145.8	535.5	1,388.6	1,357.9	30.69	45.244	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07A B21 696
Project:	Garfield County	**TVD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Reference Site:	NENE S21-T6S-R96W (B21 696 Pad)	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	OM07A B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KBE @ 8293.0ft (Original Well Elev)	Coordinates are relative to: OM07A B21 696
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Central Zone
Central Meridian is -105.500000 °	Grid Convergence at Surface is: -1.65°