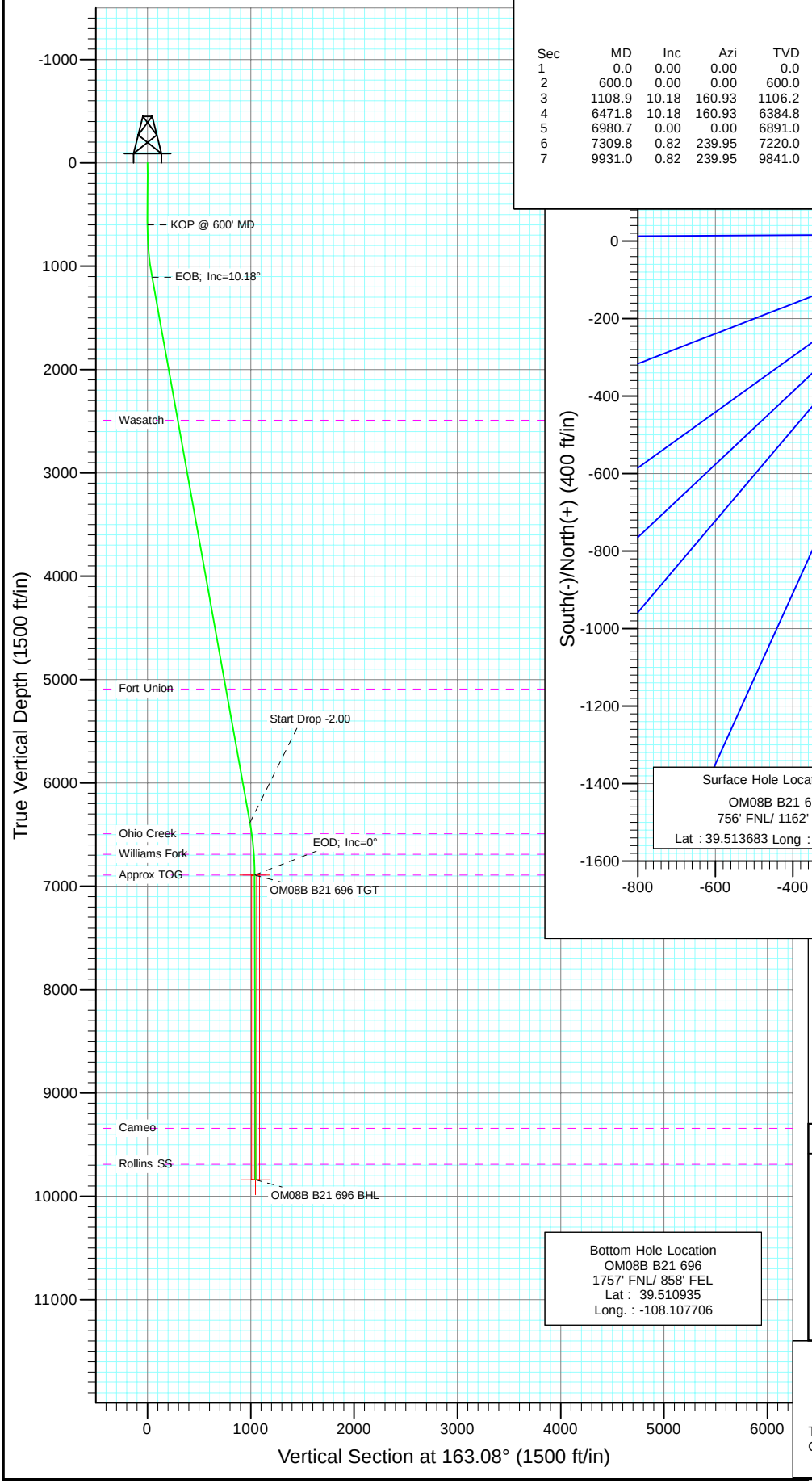
Berry Petroleum Company

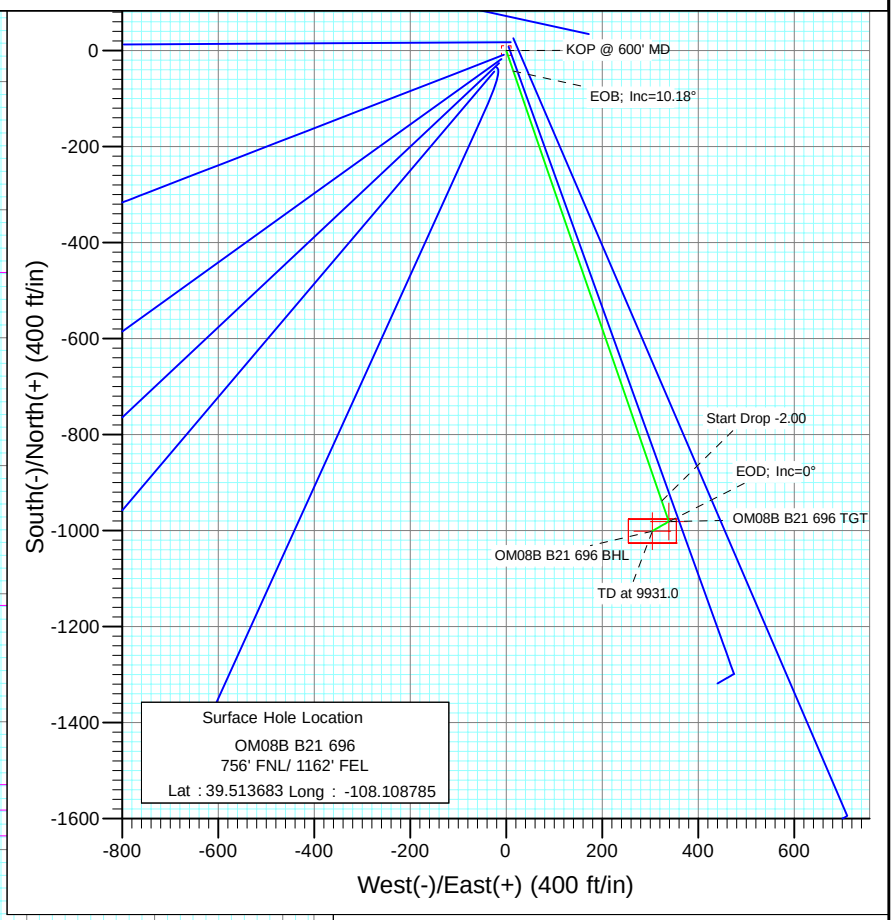
Project: Garfield County
Site: NENE S21-T6S-R96W (B21 696 Pad)
Well: OM08B B21 696
Wellbore: DD
Design: Plan #1

CATHEDRAL

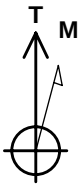
SECTION DETAILS

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	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1108.9	10.18	160.93	1106.2	-42.6	14.7	2.00	160.93	45.1	
4	6471.8	10.18	160.93	6384.8	-938.3	324.3	0.00	0.00	992.1	
5	6980.7	0.00	0.00	6891.0	-980.9	339.1	2.00	180.00	1037.1	OM08B B21 696 TGT
6	7309.8	0.82	239.95	7220.0	-982.1	337.0	0.25	239.95	1037.6	
7	9931.0	0.82	239.95	9841.0	-1000.9	304.4	0.00	0.00	1046.2	OM08B B21 696 BHL





Bottom Hole Location
OM08B B21 696
1757' FNL/ 858' FEL
Lat : 39.510935
Long. : -108.107706



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
2491.0	2515.8	Wasatch
5091.0	5157.4	Fort Union
6491.0	6579.4	Ohio Creek
6691.0	6780.6	Williams Fork
6891.0	6980.7	Approx TOG
9341.0	9431.0	Cameo
9691.0	9781.0	Rollins SS

DESIGN DETAILS: Plan #1

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

Target	Azimuth	Origin	N/S	E/W	From TVD
OM08B B21 696 BHL	163.08	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 OM08B 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:	OM08B 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	OM08B B21 696				
Well Position	**+N/-S**	0.0 ft	**Northing:**	1,622,558.10 ft	**Latitude:**	39.513683
	+E/-W	0.0 ft	**Easting:**	2,264,090.28 ft	**Longitude:**	-108.108785
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	163.08

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	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,108.9	10.18	160.93	1,106.2	-42.6	14.7	2.00	2.00	0.00	160.93	
6,471.8	10.18	160.93	6,384.8	-938.3	324.3	0.00	0.00	0.00	0.00	
6,980.7	0.00	0.00	6,891.0	-980.9	339.1	2.00	-2.00	0.00	180.00	OM08B B21 696 TGT
7,309.8	0.82	239.95	7,220.0	-982.1	337.0	0.25	0.25	-36.48	239.95	
9,931.0	0.82	239.95	9,841.0	-1,000.9	304.4	0.00	0.00	0.00	0.00	OM08B B21 696 BHL

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	
510.0	0.00	0.00	510.0	0.0	0.0	0.0	0.00	0.00	
540.0	0.00	0.00	540.0	0.0	0.0	0.0	0.00	0.00	
570.0	0.00	0.00	570.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	KOP @ 600' MD
630.0	0.60	160.93	630.0	-0.1	0.1	0.2	2.00	2.00	
660.0	1.20	160.93	660.0	-0.6	0.2	0.6	2.00	2.00	
690.0	1.80	160.93	690.0	-1.3	0.5	1.4	2.00	2.00	
720.0	2.40	160.93	720.0	-2.4	0.8	2.5	2.00	2.00	
750.0	3.00	160.93	749.9	-3.7	1.3	3.9	2.00	2.00	
780.0	3.60	160.93	779.9	-5.3	1.8	5.6	2.00	2.00	
810.0	4.20	160.93	809.8	-7.3	2.5	7.7	2.00	2.00	
840.0	4.80	160.93	839.7	-9.5	3.3	10.0	2.00	2.00	
870.0	5.40	160.93	869.6	-12.0	4.2	12.7	2.00	2.00	
900.0	6.00	160.93	899.5	-14.8	5.1	15.7	2.00	2.00	
930.0	6.60	160.93	929.3	-17.9	6.2	19.0	2.00	2.00	
960.0	7.20	160.93	959.1	-21.4	7.4	22.6	2.00	2.00	
990.0	7.80	160.93	988.8	-25.1	8.7	26.5	2.00	2.00	
1,020.0	8.40	160.93	1,018.5	-29.0	10.0	30.7	2.00	2.00	
1,050.0	9.00	160.93	1,048.2	-33.3	11.5	35.2	2.00	2.00	
1,080.0	9.60	160.93	1,077.8	-37.9	13.1	40.1	2.00	2.00	
1,108.9	10.18	160.93	1,106.2	-42.6	14.7	45.1	2.00	2.00	EOB; Inc=10.18°
1,110.0	10.18	160.93	1,107.3	-42.8	14.8	45.2	0.00	0.00	
1,140.0	10.18	160.93	1,136.8	-47.8	16.5	50.5	0.00	0.00	
1,170.0	10.18	160.93	1,166.4	-52.8	18.3	55.8	0.00	0.00	
1,200.0	10.18	160.93	1,195.9	-57.8	20.0	61.1	0.00	0.00	
1,230.0	10.18	160.93	1,225.4	-62.8	21.7	66.4	0.00	0.00	
1,260.0	10.18	160.93	1,254.9	-67.8	23.5	71.7	0.00	0.00	
1,290.0	10.18	160.93	1,284.5	-72.9	25.2	77.0	0.00	0.00	
1,320.0	10.18	160.93	1,314.0	-77.9	26.9	82.3	0.00	0.00	
1,350.0	10.18	160.93	1,343.5	-82.9	28.6	87.6	0.00	0.00	
1,380.0	10.18	160.93	1,373.1	-87.9	30.4	92.9	0.00	0.00	
1,410.0	10.18	160.93	1,402.6	-92.9	32.1	98.2	0.00	0.00	
1,440.0	10.18	160.93	1,432.1	-97.9	33.8	103.5	0.00	0.00	
1,470.0	10.18	160.93	1,461.6	-102.9	35.6	108.8	0.00	0.00	
1,500.0	10.18	160.93	1,491.2	-107.9	37.3	114.1	0.00	0.00	

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Well:	OM08B 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
1,530.0	10.18	160.93	1,520.7	-112.9	39.0	119.4	0.00	0.00	
1,560.0	10.18	160.93	1,550.2	-117.9	40.8	124.7	0.00	0.00	
1,590.0	10.18	160.93	1,579.8	-123.0	42.5	130.0	0.00	0.00	
1,620.0	10.18	160.93	1,609.3	-128.0	44.2	135.3	0.00	0.00	
1,650.0	10.18	160.93	1,638.8	-133.0	46.0	140.6	0.00	0.00	
1,680.0	10.18	160.93	1,668.3	-138.0	47.7	145.9	0.00	0.00	
1,710.0	10.18	160.93	1,697.9	-143.0	49.4	151.2	0.00	0.00	
1,740.0	10.18	160.93	1,727.4	-148.0	51.2	156.5	0.00	0.00	
1,770.0	10.18	160.93	1,756.9	-153.0	52.9	161.8	0.00	0.00	
1,800.0	10.18	160.93	1,786.5	-158.0	54.6	167.1	0.00	0.00	
1,830.0	10.18	160.93	1,816.0	-163.0	56.4	172.4	0.00	0.00	
1,860.0	10.18	160.93	1,845.5	-168.1	58.1	177.7	0.00	0.00	
1,890.0	10.18	160.93	1,875.0	-173.1	59.8	183.0	0.00	0.00	
1,920.0	10.18	160.93	1,904.6	-178.1	61.6	188.3	0.00	0.00	
1,950.0	10.18	160.93	1,934.1	-183.1	63.3	193.6	0.00	0.00	
1,980.0	10.18	160.93	1,963.6	-188.1	65.0	198.9	0.00	0.00	
2,010.0	10.18	160.93	1,993.1	-193.1	66.7	204.2	0.00	0.00	
2,040.0	10.18	160.93	2,022.7	-198.1	68.5	209.5	0.00	0.00	
2,070.0	10.18	160.93	2,052.2	-203.1	70.2	214.8	0.00	0.00	
2,100.0	10.18	160.93	2,081.7	-208.1	71.9	220.1	0.00	0.00	
2,130.0	10.18	160.93	2,111.3	-213.1	73.7	225.4	0.00	0.00	
2,160.0	10.18	160.93	2,140.8	-218.2	75.4	230.7	0.00	0.00	
2,190.0	10.18	160.93	2,170.3	-223.2	77.1	236.0	0.00	0.00	
2,220.0	10.18	160.93	2,199.8	-228.2	78.9	241.3	0.00	0.00	
2,250.0	10.18	160.93	2,229.4	-233.2	80.6	246.6	0.00	0.00	
2,280.0	10.18	160.93	2,258.9	-238.2	82.3	251.8	0.00	0.00	
2,310.0	10.18	160.93	2,288.4	-243.2	84.1	257.1	0.00	0.00	
2,340.0	10.18	160.93	2,318.0	-248.2	85.8	262.4	0.00	0.00	
2,370.0	10.18	160.93	2,347.5	-253.2	87.5	267.7	0.00	0.00	
2,400.0	10.18	160.93	2,377.0	-258.2	89.3	273.0	0.00	0.00	
2,430.0	10.18	160.93	2,406.5	-263.2	91.0	278.3	0.00	0.00	
2,460.0	10.18	160.93	2,436.1	-268.3	92.7	283.6	0.00	0.00	
2,490.0	10.18	160.93	2,465.6	-273.3	94.5	288.9	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
OM08B B21 696 BHL	0.00	0.00	9,841.0	-1,000.9	304.4	1,621,548.85	2,264,365.85	39.510935	-108.107706
- plan misses target center by 7414.2ft at 2490.0ft MD (2465.6 TVD, -273.3 N, 94.5 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
OM08B B21 696 TGT	0.00	0.00	6,891.0	-980.9	339.1	1,621,567.87	2,264,401.03	39.510990	-108.107583
- plan misses target center by 4488.3ft at 2490.0ft MD (2465.6 TVD, -273.3 N, 94.5 E)									
- Point									

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Site:	NENE S21-T6S-R96W (B21 696 Pad)	**North Reference:**	True
Well:	OM08B 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	10.18	160.93	2,475.4	-274.9	95.0	290.7	0.00	0.00	
2,515.8	10.18	160.93	2,491.0	-277.6	95.9	293.5	0.00	0.00	Wasatch
2,600.0	10.18	160.93	2,573.9	-291.6	100.8	308.4	0.00	0.00	
2,700.0	10.18	160.93	2,672.3	-308.3	106.6	326.0	0.00	0.00	
2,800.0	10.18	160.93	2,770.7	-325.0	112.4	343.7	0.00	0.00	
2,900.0	10.18	160.93	2,869.1	-341.7	118.1	361.3	0.00	0.00	
3,000.0	10.18	160.93	2,967.6	-358.4	123.9	379.0	0.00	0.00	
3,100.0	10.18	160.93	3,066.0	-375.1	129.7	396.6	0.00	0.00	
3,200.0	10.18	160.93	3,164.4	-391.9	135.4	414.3	0.00	0.00	
3,300.0	10.18	160.93	3,262.8	-408.6	141.2	432.0	0.00	0.00	
3,400.0	10.18	160.93	3,361.3	-425.3	147.0	449.6	0.00	0.00	
3,500.0	10.18	160.93	3,459.7	-442.0	152.8	467.3	0.00	0.00	
3,600.0	10.18	160.93	3,558.1	-458.7	158.5	484.9	0.00	0.00	
3,700.0	10.18	160.93	3,656.6	-475.4	164.3	502.6	0.00	0.00	
3,800.0	10.18	160.93	3,755.0	-492.1	170.1	520.3	0.00	0.00	
3,900.0	10.18	160.93	3,853.4	-508.8	175.9	537.9	0.00	0.00	
4,000.0	10.18	160.93	3,951.8	-525.5	181.6	555.6	0.00	0.00	
4,100.0	10.18	160.93	4,050.3	-542.2	187.4	573.2	0.00	0.00	
4,200.0	10.18	160.93	4,148.7	-558.9	193.2	590.9	0.00	0.00	
4,300.0	10.18	160.93	4,247.1	-575.6	198.9	608.5	0.00	0.00	
4,400.0	10.18	160.93	4,345.5	-592.3	204.7	626.2	0.00	0.00	
4,500.0	10.18	160.93	4,444.0	-609.0	210.5	643.9	0.00	0.00	
4,600.0	10.18	160.93	4,542.4	-625.7	216.3	661.5	0.00	0.00	
4,700.0	10.18	160.93	4,640.8	-642.4	222.0	679.2	0.00	0.00	
4,800.0	10.18	160.93	4,739.2	-659.1	227.8	696.8	0.00	0.00	
4,900.0	10.18	160.93	4,837.7	-675.8	233.6	714.5	0.00	0.00	
5,000.0	10.18	160.93	4,936.1	-692.5	239.4	732.2	0.00	0.00	
5,100.0	10.18	160.93	5,034.5	-709.2	245.1	749.8	0.00	0.00	
5,157.4	10.18	160.93	5,091.0	-718.8	248.4	759.9	0.00	0.00	Fort Union
5,200.0	10.18	160.93	5,132.9	-725.9	250.9	767.5	0.00	0.00	
5,300.0	10.18	160.93	5,231.4	-742.6	256.7	785.1	0.00	0.00	
5,400.0	10.18	160.93	5,329.8	-759.3	262.4	802.8	0.00	0.00	
5,500.0	10.18	160.93	5,428.2	-776.0	268.2	820.5	0.00	0.00	
5,600.0	10.18	160.93	5,526.7	-792.7	274.0	838.1	0.00	0.00	
5,700.0	10.18	160.93	5,625.1	-809.4	279.8	855.8	0.00	0.00	
5,800.0	10.18	160.93	5,723.5	-826.1	285.5	873.4	0.00	0.00	
5,900.0	10.18	160.93	5,821.9	-842.8	291.3	891.1	0.00	0.00	
6,000.0	10.18	160.93	5,920.4	-859.5	297.1	908.7	0.00	0.00	
6,100.0	10.18	160.93	6,018.8	-876.2	302.9	926.4	0.00	0.00	
6,200.0	10.18	160.93	6,117.2	-892.9	308.6	944.1	0.00	0.00	
6,300.0	10.18	160.93	6,215.6	-909.6	314.4	961.7	0.00	0.00	
6,400.0	10.18	160.93	6,314.1	-926.3	320.2	979.4	0.00	0.00	
6,471.8	10.18	160.93	6,384.8	-938.3	324.3	992.1	0.00	0.00	Start Drop -2.00
6,500.0	9.61	160.93	6,412.5	-942.9	325.9	996.9	2.00	-2.00	
6,579.4	8.03	160.93	6,491.0	-954.4	329.9	1,009.1	2.00	-2.00	Ohio Creek
6,600.0	7.61	160.93	6,511.4	-957.0	330.8	1,011.9	2.00	-2.00	
6,700.0	5.61	160.93	6,610.7	-967.9	334.6	1,023.4	2.00	-2.00	
6,780.6	4.00	160.93	6,691.0	-974.3	336.8	1,030.1	2.00	-2.00	Williams Fork
6,800.0	3.61	160.93	6,710.4	-975.5	337.2	1,031.4	2.00	-2.00	
6,900.0	1.61	160.93	6,810.3	-979.8	338.7	1,036.0	2.00	-2.00	
6,980.7	0.00	0.00	6,891.0	-980.9	339.1	1,037.1	2.00	-2.00	EOD; Inc=0° - Approx TOG - OM08B B21 696 T
7,000.0	0.05	239.95	6,910.3	-980.9	339.0	1,037.1	0.25	0.25	

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	0.30	239.95	7,010.3	-981.1	338.8	1,037.2	0.25	0.25	
7,200.0	0.55	239.95	7,110.3	-981.4	338.1	1,037.4	0.25	0.25	
7,300.0	0.80	239.95	7,210.2	-982.0	337.1	1,037.6	0.25	0.25	
7,309.8	0.82	239.95	7,220.0	-982.1	337.0	1,037.6	0.25	0.25	
7,400.0	0.82	239.95	7,310.2	-982.7	335.9	1,037.9	0.00	0.00	
7,500.0	0.82	239.95	7,410.2	-983.5	334.6	1,038.3	0.00	0.00	
7,600.0	0.82	239.95	7,510.2	-984.2	333.4	1,038.6	0.00	0.00	
7,700.0	0.82	239.95	7,610.2	-984.9	332.2	1,038.9	0.00	0.00	
7,800.0	0.82	239.95	7,710.2	-985.6	330.9	1,039.2	0.00	0.00	
7,900.0	0.82	239.95	7,810.2	-986.3	329.7	1,039.6	0.00	0.00	
8,000.0	0.82	239.95	7,910.2	-987.0	328.4	1,039.9	0.00	0.00	
8,100.0	0.82	239.95	8,010.2	-987.8	327.2	1,040.2	0.00	0.00	
8,200.0	0.82	239.95	8,110.2	-988.5	325.9	1,040.6	0.00	0.00	
8,300.0	0.82	239.95	8,210.1	-989.2	324.7	1,040.9	0.00	0.00	
8,400.0	0.82	239.95	8,310.1	-989.9	323.5	1,041.2	0.00	0.00	
8,500.0	0.82	239.95	8,410.1	-990.6	322.2	1,041.5	0.00	0.00	
8,600.0	0.82	239.95	8,510.1	-991.4	321.0	1,041.9	0.00	0.00	
8,700.0	0.82	239.95	8,610.1	-992.1	319.7	1,042.2	0.00	0.00	
8,800.0	0.82	239.95	8,710.1	-992.8	318.5	1,042.5	0.00	0.00	
8,900.0	0.82	239.95	8,810.1	-993.5	317.2	1,042.8	0.00	0.00	
9,000.0	0.82	239.95	8,910.1	-994.2	316.0	1,043.2	0.00	0.00	
9,100.0	0.82	239.95	9,010.1	-995.0	314.8	1,043.5	0.00	0.00	
9,200.0	0.82	239.95	9,110.1	-995.7	313.5	1,043.8	0.00	0.00	
9,300.0	0.82	239.95	9,210.0	-996.4	312.3	1,044.1	0.00	0.00	
9,400.0	0.82	239.95	9,310.0	-997.1	311.0	1,044.5	0.00	0.00	
9,431.0	0.82	239.95	9,341.0	-997.3	310.6	1,044.6	0.00	0.00	Cameo
9,500.0	0.82	239.95	9,410.0	-997.8	309.8	1,044.8	0.00	0.00	
9,600.0	0.82	239.95	9,510.0	-998.5	308.5	1,045.1	0.00	0.00	
9,700.0	0.82	239.95	9,610.0	-999.3	307.3	1,045.4	0.00	0.00	
9,781.0	0.82	239.95	9,691.0	-999.8	306.3	1,045.7	0.00	0.00	Rollins SS
9,800.0	0.82	239.95	9,710.0	-1,000.0	306.1	1,045.8	0.00	0.00	
9,900.0	0.82	239.95	9,810.0	-1,000.7	304.8	1,046.1	0.00	0.00	
9,931.0	0.82	239.95	9,841.0	-1,000.9	304.4	1,046.2	0.00	0.00	TD at 9931.0 - OM08B 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
OM08B B21 696 BHL - plan hits target center - Rectangle (sides W50.0 H100.0 D0.0)	0.00	0.00	9,841.0	-1,000.9	304.4	1,621,548.85	2,264,365.85	39.510935	-108.107706
OM08B B21 696 TGT - plan hits target center - Point	0.00	0.00	6,891.0	-980.9	339.1	1,621,567.87	2,264,401.03	39.510990	-108.107583

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,515.8	2,491.0	Wasatch		0.00	
5,157.4	5,091.0	Fort Union		0.00	
6,579.4	6,491.0	Ohio Creek		0.00	
6,780.6	6,691.0	Williams Fork		0.00	
6,980.7	6,891.0	Approx TOG		0.00	
9,431.0	9,341.0	Cameo		0.00	
9,781.0	9,691.0	Rollins SS		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
600.0	600.0	0.0	0.0	KOP @ 600' MD
1,108.9	1,106.2	-42.6	14.7	EOB; Inc=10.18°
6,471.8	6,384.8	-938.3	324.3	Start Drop -2.00
6,980.7	6,891.0	-980.9	339.1	EOD; Inc=0°
9,931.0	9,841.0	-1,000.9	304.4	TD at 9931.0

Berry Petroleum Company (NAD 83)

Garfield County
NENE S21-T6S-R96W (B21 696 Pad)
OM08B 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 OM08B 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:	OM08B 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	9,931.0	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	998.9	1,014.9	102.6	98.2	23.508	CC
OM02B B21 696 - DD - Plan #1	1,000.0	1,016.0	102.6	98.2	23.466	ES
OM02B B21 696 - DD - Plan #1	1,100.0	1,111.0	108.4	103.3	21.591	SF
OM02C B21 696 - DD - Plan #1	438.8	439.1	17.4	15.9	11.468	CC, ES
OM02C B21 696 - DD - Plan #1	500.0	500.0	18.4	16.6	10.376	SF
OM02D B21 696 - DD - Plan #1	500.0	500.0	10.0	8.3	5.890	CC, ES
OM02D B21 696 - DD - Plan #1	600.0	599.7	11.4	9.3	5.563	SF
OM07A B21 696 - DD - Plan #1	500.0	500.0	20.1	18.4	11.860	CC, ES
OM07A B21 696 - DD - Plan #1	600.0	599.3	21.7	19.6	10.615	SF
OM07B B21 696 - DD - Plan #1	400.0	400.0	30.1	28.7	22.360	CC, ES
OM07B B21 696 - DD - Plan #1	600.0	597.7	36.7	34.7	18.002	SF
OM07C B21 696 - DD - Plan #1	300.0	300.0	49.8	48.8	50.074	CC, ES
OM07C B21 696 - DD - Plan #1	9,931.0	9,998.7	1,380.9	1,331.1	27.688	SF
OM07D B21 696 - DD - Plan #1	200.0	200.0	40.2	39.5	62.187	CC
OM07D B21 696 - DD - Plan #1	300.0	299.8	40.4	39.4	40.441	ES
OM07D B21 696 - DD - Plan #1	9,931.0	10,027.7	1,158.6	1,108.8	23.302	SF
OM08C B21 696 - DD - Plan #1	492.9	493.1	7.7	6.1	4.591	CC
OM08C B21 696 - DD - Plan #1	500.0	500.1	7.8	6.0	4.533	ES, SF
OM08D B21 696 - DD - Plan #1	519.4	520.0	23.9	22.1	12.969	CC, ES
OM08D B21 696 - DD - Plan #1	600.0	600.0	26.0	23.8	12.153	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	78.65	34.6	172.4	175.8				
100.0	100.0	100.0	100.0	0.1	0.1	78.65	34.6	172.4	175.8	175.5	0.30	592.576	
200.0	200.0	200.0	200.0	0.3	0.3	78.65	34.6	172.4	175.8	175.2	0.65	272.265	
300.0	300.0	305.9	305.9	0.5	0.5	78.39	35.0	170.5	174.1	173.1	1.01	173.225	
400.0	400.0	411.5	411.3	0.7	0.7	77.58	36.3	164.8	169.1	167.7	1.36	123.922	
500.0	500.0	516.6	515.9	0.8	1.0	76.14	38.3	155.3	160.8	159.0	1.72	93.279	
600.0	600.0	620.8	619.3	1.0	1.3	73.86	41.2	142.2	149.3	147.2	2.08	71.658	
700.0	700.0	723.7	720.8	1.2	1.6	-91.59	44.8	125.7	135.1	132.6	2.55	53.000	
800.0	799.8	823.6	818.8	1.4	2.0	-99.62	49.0	106.5	119.6	116.5	3.05	39.144	
900.0	899.5	920.2	913.2	1.6	2.3	-111.27	53.2	87.0	107.4	103.7	3.67	29.248	
998.9	997.6	1,014.9	1,006.0	1.8	2.7	-126.01	57.4	68.0	102.6	98.2	4.36	23.508	CC
1,000.0	998.7	1,016.0	1,007.0	1.8	2.7	-126.19	57.4	67.8	102.6	98.2	4.37	23.466	ES
1,100.0	1,097.5	1,111.0	1,099.9	2.1	3.1	-142.11	61.6	48.7	108.4	103.3	5.02	21.591	SF
1,200.0	1,195.9	1,205.4	1,192.3	2.4	3.5	-156.00	65.7	29.7	124.0	118.4	5.52	22.447	
1,300.0	1,294.3	1,299.8	1,284.8	2.7	3.8	-166.54	69.9	10.7	145.5	139.5	5.93	24.544	
1,400.0	1,392.7	1,394.3	1,377.2	3.0	4.2	-174.31	74.0	-8.3	170.7	164.4	6.29	27.116	
1,500.0	1,491.2	1,488.7	1,469.6	3.4	4.6	179.91	78.1	-27.3	198.1	191.5	6.66	29.768	
1,600.0	1,589.6	1,583.1	1,562.0	3.7	5.0	175.53	82.3	-46.3	227.1	220.0	7.03	32.316	
1,700.0	1,688.0	1,677.5	1,654.4	4.0	5.4	172.14	86.4	-65.3	257.0	249.6	7.41	34.687	
1,800.0	1,786.5	1,772.0	1,746.8	4.4	5.7	169.45	90.5	-84.3	287.5	279.7	7.80	36.859	
1,900.0	1,884.9	1,866.4	1,839.2	4.7	6.1	167.27	94.7	-103.3	318.5	310.3	8.20	38.836	
2,000.0	1,983.3	1,960.8	1,931.6	5.1	6.5	165.47	98.8	-122.3	349.9	341.3	8.61	40.630	
2,100.0	2,081.7	2,055.2	2,024.0	5.4	6.9	163.97	103.0	-141.3	381.6	372.5	9.03	42.260	
2,200.0	2,180.2	2,149.7	2,116.4	5.8	7.3	162.70	107.1	-160.3	413.4	403.9	9.45	43.741	
2,300.0	2,278.6	2,244.1	2,208.8	6.1	7.6	161.61	111.2	-179.3	445.4	435.5	9.88	45.091	
2,400.0	2,377.0	2,338.5	2,301.2	6.5	8.0	160.66	115.4	-198.3	477.5	467.2	10.31	46.324	
2,500.0	2,475.4	2,432.9	2,393.6	6.8	8.4	159.84	119.5	-217.3	509.7	499.0	10.74	47.453	
2,600.0	2,573.9	2,527.3	2,486.0	7.2	8.8	159.11	123.7	-236.3	542.1	530.9	11.18	48.491	
2,700.0	2,672.3	2,621.8	2,578.4	7.5	9.2	158.46	127.8	-255.3	574.4	562.8	11.62	49.447	
2,800.0	2,770.7	2,716.2	2,670.8	7.9	9.6	157.88	131.9	-274.2	606.9	594.8	12.06	50.330	
2,900.0	2,869.1	2,810.6	2,763.2	8.2	9.9	157.36	136.1	-293.2	639.4	626.9	12.50	51.147	
3,000.0	2,967.6	2,905.0	2,855.6	8.6	10.3	156.90	140.2	-312.2	671.9	658.9	12.94	51.906	
3,100.0	3,066.0	2,999.5	2,948.0	8.9	10.7	156.47	144.4	-331.2	704.5	691.1	13.39	52.612	
3,200.0	3,164.4	3,093.9	3,040.4	9.3	11.1	156.08	148.5	-350.2	737.1	723.2	13.84	53.270	
3,300.0	3,262.8	3,188.3	3,132.8	9.6	11.5	155.73	152.6	-369.2	769.7	755.4	14.28	53.886	
3,400.0	3,361.3	3,282.7	3,225.2	10.0	11.8	155.40	156.8	-388.2	802.3	787.6	14.73	54.462	
3,500.0	3,459.7	3,377.2	3,317.6	10.3	12.2	155.10	160.9	-407.2	835.0	819.8	15.18	55.003	
3,600.0	3,558.1	3,471.6	3,410.0	10.7	12.6	154.82	165.1	-426.2	867.7	852.1	15.63	55.512	
3,700.0	3,656.6	3,566.0	3,502.4	11.0	13.0	154.56	169.2	-445.2	900.4	884.3	16.08	55.991	
3,800.0	3,755.0	3,660.4	3,594.8	11.4	13.4	154.32	173.3	-464.2	933.1	916.6	16.53	56.442	
3,900.0	3,853.4	3,754.9	3,687.2	11.7	13.8	154.10	177.5	-483.2	965.9	948.9	16.98	56.869	
4,000.0	3,951.8	3,849.3	3,779.6	12.1	14.1	153.89	181.6	-502.2	998.6	981.2	17.44	57.273	
4,100.0	4,050.3	3,943.7	3,872.0	12.4	14.5	153.69	185.8	-521.2	1,031.4	1,013.5	17.89	57.656	
4,200.0	4,148.7	4,038.1	3,964.4	12.8	14.9	153.51	189.9	-540.2	1,064.1	1,045.8	18.34	58.019	
4,300.0	4,247.1	4,132.6	4,056.8	13.1	15.3	153.33	194.0	-559.2	1,096.9	1,078.1	18.79	58.364	
4,400.0	4,345.5	4,227.0	4,149.2	13.5	15.7	153.17	198.2	-578.2	1,129.7	1,110.5	19.25	58.692	
4,500.0	4,444.0	4,321.4	4,241.6	13.8	16.1	153.02	202.3	-597.2	1,162.5	1,142.8	19.70	59.005	
4,600.0	4,542.4	4,415.8	4,334.0	14.2	16.4	152.87	206.5	-616.2	1,195.3	1,175.2	20.16	59.302	
4,700.0	4,640.8	4,510.3	4,426.4	14.6	16.8	152.73	210.6	-635.1	1,228.1	1,207.5	20.61	59.587	
4,800.0	4,739.2	4,604.7	4,518.8	14.9	17.2	152.60	214.7	-654.1	1,260.9	1,239.9	21.07	59.859	
4,900.0	4,837.7	4,699.1	4,611.2	15.3	17.6	152.48	218.9	-673.1	1,293.8	1,272.2	21.52	60.119	
5,000.0	4,936.1	4,793.5	4,703.6	15.6	18.0	152.36	223.0	-692.1	1,326.6	1,304.6	21.98	60.367	

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 OM08B 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:	OM08B 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

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,034.5	4,888.0	4,796.0	16.0	18.4	152.25	227.2	-711.1	1,359.4	1,337.0	22.43	60.606	
5,200.0	5,132.9	4,982.4	4,888.4	16.3	18.7	152.14	231.3	-730.1	1,392.3	1,369.4	22.89	60.834	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	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	300.3	300.3	0.5	0.5	24.92	17.5	8.1	19.3	18.3	1.00	19.322	
400.0	400.0	400.4	400.2	0.7	0.7	9.34	17.4	2.9	17.7	16.3	1.36	12.966	
438.8	438.8	439.1	438.8	0.7	0.8	-0.31	17.4	-0.1	17.4	15.9	1.52	11.468	CC, ES
500.0	500.0	500.0	499.5	0.8	0.9	-18.49	17.4	-5.8	18.4	16.6	1.77	10.376	SF
600.0	600.0	598.8	597.5	1.0	1.2	-45.82	17.3	-17.8	25.0	22.8	2.18	11.485	
700.0	700.0	697.1	694.6	1.2	1.5	138.34	17.2	-32.9	38.8	36.3	2.46	15.752	
800.0	799.8	795.4	791.7	1.4	1.8	133.65	17.2	-48.5	56.7	53.8	2.82	20.110	
900.0	899.5	893.3	888.3	1.6	2.1	133.03	17.1	-64.1	77.0	73.8	3.20	24.084	
1,000.0	998.7	990.6	984.5	1.8	2.4	134.01	17.0	-79.6	99.7	96.1	3.60	27.670	
1,100.0	1,097.5	1,087.3	1,079.9	2.1	2.7	135.64	16.9	-94.9	124.9	120.8	4.04	30.924	
1,200.0	1,195.9	1,183.6	1,175.0	2.4	3.0	137.48	16.8	-110.2	151.6	147.1	4.49	33.731	
1,300.0	1,294.3	1,279.9	1,270.0	2.7	3.4	138.79	16.7	-125.6	178.4	173.4	4.95	36.001	
1,400.0	1,392.7	1,376.2	1,365.1	3.0	3.7	139.76	16.7	-140.9	205.2	199.8	5.42	37.879	
1,500.0	1,491.2	1,472.4	1,460.1	3.4	4.0	140.51	16.6	-156.2	232.2	226.3	5.88	39.455	
1,600.0	1,589.6	1,568.7	1,555.2	3.7	4.3	141.10	16.5	-171.5	259.1	252.8	6.35	40.795	
1,700.0	1,688.0	1,665.0	1,650.2	4.0	4.6	141.58	16.4	-186.8	286.1	279.3	6.82	41.948	
1,800.0	1,786.5	1,761.2	1,745.3	4.4	4.9	141.98	16.3	-202.1	313.1	305.8	7.29	42.949	
1,900.0	1,884.9	1,857.5	1,840.3	4.7	5.2	142.31	16.2	-217.4	340.1	332.3	7.76	43.827	
2,000.0	1,983.3	1,953.8	1,935.3	5.1	5.6	142.60	16.2	-232.7	367.1	358.8	8.23	44.602	
2,100.0	2,081.7	2,050.1	2,030.4	5.4	5.9	142.84	16.1	-248.0	394.1	385.4	8.70	45.291	
2,200.0	2,180.2	2,146.3	2,125.4	5.8	6.2	143.06	16.0	-263.3	421.1	411.9	9.17	45.908	
2,300.0	2,278.6	2,242.6	2,220.5	6.1	6.5	143.24	15.9	-278.7	448.1	438.5	9.64	46.464	
2,400.0	2,377.0	2,338.9	2,315.5	6.5	6.8	143.41	15.8	-294.0	475.1	465.0	10.12	46.966	
2,500.0	2,475.4	2,435.1	2,410.6	6.8	7.1	143.56	15.7	-309.3	502.2	491.6	10.59	47.423	
2,600.0	2,573.9	2,531.4	2,505.6	7.2	7.5	143.69	15.7	-324.6	529.2	518.1	11.06	47.840	
2,700.0	2,672.3	2,627.7	2,600.7	7.5	7.8	143.82	15.6	-339.9	556.2	544.7	11.53	48.222	
2,800.0	2,770.7	2,723.9	2,695.7	7.9	8.1	143.93	15.5	-355.2	583.3	571.3	12.01	48.573	
2,900.0	2,869.1	2,820.2	2,790.7	8.2	8.4	144.03	15.4	-370.5	610.3	597.8	12.48	48.898	
3,000.0	2,967.6	2,916.5	2,885.8	8.6	8.7	144.12	15.3	-385.8	637.3	624.4	12.95	49.198	
3,100.0	3,066.0	3,012.8	2,980.8	8.9	9.1	144.20	15.2	-401.1	664.4	651.0	13.43	49.476	
3,200.0	3,164.4	3,109.0	3,075.9	9.3	9.4	144.28	15.1	-416.4	691.4	677.5	13.90	49.736	
3,300.0	3,262.8	3,205.3	3,170.9	9.6	9.7	144.35	15.1	-431.8	718.5	704.1	14.38	49.978	
3,400.0	3,361.3	3,301.6	3,266.0	10.0	10.0	144.42	15.0	-447.1	745.5	730.7	14.85	50.204	
3,500.0	3,459.7	3,397.8	3,361.0	10.3	10.3	144.48	14.9	-462.4	772.6	757.2	15.32	50.416	
3,600.0	3,558.1	3,494.1	3,456.1	10.7	10.6	144.54	14.8	-477.7	799.6	783.8	15.80	50.615	
3,700.0	3,656.6	3,590.4	3,551.1	11.0	11.0	144.59	14.7	-493.0	826.7	810.4	16.27	50.802	
3,800.0	3,755.0	3,686.6	3,646.1	11.4	11.3	144.64	14.6	-508.3	853.7	837.0	16.75	50.979	
3,900.0	3,853.4	3,782.9	3,741.2	11.7	11.6	144.69	14.6	-523.6	880.8	863.5	17.22	51.145	
4,000.0	3,951.8	3,879.2	3,836.2	12.1	11.9	144.73	14.5	-538.9	907.8	890.1	17.69	51.303	
4,100.0	4,050.3	3,975.5	3,931.3	12.4	12.2	144.77	14.4	-554.2	934.8	916.7	18.17	51.452	
4,200.0	4,148.7	4,071.7	4,026.3	12.8	12.6	144.81	14.3	-569.6	961.9	943.3	18.64	51.593	
4,300.0	4,247.1	4,168.0	4,121.4	13.1	12.9	144.85	14.2	-584.9	988.9	969.8	19.12	51.728	
4,400.0	4,345.5	4,264.3	4,216.4	13.5	13.2	144.89	14.1	-600.2	1,016.0	996.4	19.59	51.856	
4,500.0	4,444.0	4,360.5	4,311.5	13.8	13.5	144.92	14.1	-615.5	1,043.0	1,023.0	20.07	51.977	
4,600.0	4,542.4	4,456.8	4,406.5	14.2	13.8	144.95	14.0	-630.8	1,070.1	1,049.6	20.54	52.093	
4,700.0	4,640.8	4,553.1	4,501.6	14.6	14.1	144.98	13.9	-646.1	1,097.2	1,076.1	21.02	52.204	
4,800.0	4,739.2	4,649.3	4,596.6	14.9	14.5	145.01	13.8	-661.4	1,124.2	1,102.7	21.49	52.310	
4,900.0	4,837.7	4,745.6	4,691.6	15.3	14.8	145.04	13.7	-676.7	1,151.3	1,129.3	21.97	52.411	
5,000.0	4,936.1	4,841.9	4,786.7	15.6	15.1	145.06	13.6	-692.0	1,178.3	1,155.9	22.44	52.508	

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 OM08B 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:	OM08B 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	5,034.5	4,938.2	4,881.7	16.0	15.4	145.09	13.6	-707.3	1,205.4	1,182.4	22.92	52.600	
5,200.0	5,132.9	5,034.4	4,976.8	16.3	15.7	145.11	13.5	-722.7	1,232.4	1,209.0	23.39	52.689	
5,300.0	5,231.4	5,130.7	5,071.8	16.7	16.1	145.14	13.4	-738.0	1,259.5	1,235.6	23.86	52.775	
5,400.0	5,329.8	5,227.0	5,166.9	17.0	16.4	145.16	13.3	-753.3	1,286.5	1,262.2	24.34	52.857	
5,500.0	5,428.2	5,323.2	5,261.9	17.4	16.7	145.18	13.2	-768.6	1,313.6	1,288.8	24.81	52.935	
5,600.0	5,526.7	5,419.5	5,357.0	17.7	17.0	145.20	13.1	-783.9	1,340.6	1,315.3	25.29	53.011	
5,700.0	5,625.1	5,515.8	5,452.0	18.1	17.3	145.22	13.1	-799.2	1,367.7	1,341.9	25.76	53.084	
5,800.0	5,723.5	5,612.0	5,547.0	18.4	17.6	145.24	13.0	-814.5	1,394.7	1,368.5	26.24	53.154	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	-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	
500.0	500.0	500.0	500.0	0.8	0.8	-151.25	-8.7	-4.8	10.0	8.3	1.69	5.890	CC, ES
600.0	600.0	599.7	599.7	1.0	1.0	-145.60	-9.4	-6.4	11.4	9.3	2.04	5.563	SF
700.0	700.0	699.1	699.0	1.2	1.2	69.90	-11.2	-11.2	15.3	12.9	2.39	6.376	
800.0	799.8	798.0	797.5	1.4	1.4	88.89	-14.3	-19.2	23.0	20.2	2.75	8.363	
900.0	899.5	895.9	894.7	1.6	1.7	102.14	-18.6	-30.3	35.9	32.8	3.13	11.480	
1,000.0	998.7	992.6	990.2	1.8	1.9	110.22	-24.0	-44.2	54.0	50.5	3.55	15.236	
1,100.0	1,097.5	1,087.8	1,083.7	2.1	2.2	115.19	-30.4	-60.8	77.1	73.0	4.01	19.198	
1,200.0	1,195.9	1,183.8	1,177.6	2.4	2.6	118.51	-37.7	-79.5	103.2	98.7	4.51	22.876	
1,300.0	1,294.3	1,280.2	1,271.8	2.7	3.0	120.52	-44.9	-98.4	129.6	124.5	5.03	25.769	
1,400.0	1,392.7	1,376.6	1,366.1	3.0	3.3	121.85	-52.2	-117.2	156.0	150.5	5.56	28.075	
1,500.0	1,491.2	1,472.9	1,460.3	3.4	3.7	122.79	-59.5	-136.0	182.6	176.5	6.10	29.942	
1,600.0	1,589.6	1,569.3	1,554.6	3.7	4.1	123.49	-66.8	-154.8	209.1	202.5	6.64	31.478	
1,700.0	1,688.0	1,665.7	1,648.8	4.0	4.5	124.04	-74.1	-173.6	235.7	228.5	7.20	32.759	
1,800.0	1,786.5	1,762.1	1,743.0	4.4	4.8	124.47	-81.3	-192.5	262.3	254.6	7.75	33.840	
1,900.0	1,884.9	1,858.5	1,837.3	4.7	5.2	124.82	-88.6	-211.3	288.9	280.6	8.31	34.764	
2,000.0	1,983.3	1,954.8	1,931.5	5.1	5.6	125.12	-95.9	-230.1	315.6	306.7	8.87	35.561	
2,100.0	2,081.7	2,051.2	2,025.8	5.4	6.0	125.37	-103.2	-248.9	342.2	332.8	9.44	36.256	
2,200.0	2,180.2	2,147.6	2,120.0	5.8	6.4	125.58	-110.5	-267.7	368.8	358.8	10.00	36.865	
2,300.0	2,278.6	2,244.0	2,214.3	6.1	6.8	125.76	-117.7	-286.6	395.5	384.9	10.57	37.404	
2,400.0	2,377.0	2,340.4	2,308.5	6.5	7.2	125.93	-125.0	-305.4	422.1	411.0	11.14	37.884	
2,500.0	2,475.4	2,436.7	2,402.7	6.8	7.6	126.07	-132.3	-324.2	448.8	437.0	11.71	38.314	
2,600.0	2,573.9	2,533.1	2,497.0	7.2	7.9	126.19	-139.6	-343.0	475.4	463.1	12.28	38.700	
2,700.0	2,672.3	2,629.5	2,591.2	7.5	8.3	126.31	-146.9	-361.8	502.1	489.2	12.86	39.050	
2,800.0	2,770.7	2,725.9	2,685.5	7.9	8.7	126.41	-154.1	-380.7	528.7	515.3	13.43	39.368	
2,900.0	2,869.1	2,822.3	2,779.7	8.2	9.1	126.50	-161.4	-399.5	555.4	541.4	14.00	39.659	
3,000.0	2,967.6	2,918.6	2,874.0	8.6	9.5	126.58	-168.7	-418.3	582.0	567.4	14.58	39.925	
3,100.0	3,066.0	3,015.0	2,968.2	8.9	9.9	126.66	-176.0	-437.1	608.7	593.5	15.15	40.169	
3,200.0	3,164.4	3,111.4	3,062.4	9.3	10.3	126.73	-183.3	-455.9	635.3	619.6	15.73	40.395	
3,300.0	3,262.8	3,207.8	3,156.7	9.6	10.7	126.79	-190.5	-474.7	662.0	645.7	16.30	40.604	
3,400.0	3,361.3	3,304.2	3,250.9	10.0	11.1	126.85	-197.8	-493.6	688.6	671.7	16.88	40.797	
3,500.0	3,459.7	3,400.5	3,345.2	10.3	11.5	126.90	-205.1	-512.4	715.3	697.8	17.46	40.977	
3,600.0	3,558.1	3,496.9	3,439.4	10.7	11.9	126.95	-212.4	-531.2	741.9	723.9	18.03	41.145	
3,700.0	3,656.6	3,593.3	3,533.7	11.0	12.3	127.00	-219.7	-550.0	768.6	750.0	18.61	41.302	
3,800.0	3,755.0	3,689.7	3,627.9	11.4	12.7	127.05	-226.9	-568.8	795.3	776.1	19.19	41.449	
3,900.0	3,853.4	3,786.1	3,722.1	11.7	13.1	127.09	-234.2	-587.7	821.9	802.2	19.76	41.587	
4,000.0	3,951.8	3,882.4	3,816.4	12.1	13.5	127.13	-241.5	-606.5	848.6	828.2	20.34	41.717	
4,100.0	4,050.3	3,978.8	3,910.6	12.4	13.9	127.16	-248.8	-625.3	875.2	854.3	20.92	41.840	
4,200.0	4,148.7	4,075.2	4,004.9	12.8	14.3	127.20	-256.1	-644.1	901.9	880.4	21.50	41.955	
4,300.0	4,247.1	4,171.6	4,099.1	13.1	14.6	127.23	-263.3	-662.9	928.6	906.5	22.07	42.064	
4,400.0	4,345.5	4,268.0	4,193.4	13.5	15.0	127.26	-270.6	-681.8	955.2	932.6	22.65	42.167	
4,500.0	4,444.0	4,364.3	4,287.6	13.8	15.4	127.29	-277.9	-700.6	981.9	958.6	23.23	42.265	
4,600.0	4,542.4	4,460.7	4,381.9	14.2	15.8	127.31	-285.2	-719.4	1,008.5	984.7	23.81	42.358	
4,700.0	4,640.8	4,557.1	4,476.1	14.6	16.2	127.34	-292.5	-738.2	1,035.2	1,010.8	24.39	42.446	
4,800.0	4,739.2	4,685.1	4,601.7	14.9	16.7	127.45	-301.4	-761.2	1,060.7	1,035.6	25.03	42.378	
4,900.0	4,837.7	4,821.1	4,736.2	15.3	17.1	127.78	-308.6	-779.9	1,082.7	1,057.0	25.64	42.222	
5,000.0	4,936.1	4,958.7	4,873.1	15.6	17.4	128.33	-313.5	-792.7	1,101.2	1,075.0	26.21	42.009	
5,100.0	5,034.5	5,097.2	5,011.4	16.0	17.6	129.08	-316.1	-799.4	1,116.3	1,089.5	26.74	41.743	

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 OM08B 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:	OM08B 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	5,132.9	5,217.5	5,131.7	16.3	17.7	129.88	-316.6	-800.5	1,128.2	1,101.0	27.20	41.475	
5,300.0	5,231.4	5,313.0	5,227.2	16.7	17.8	130.52	-316.7	-800.8	1,140.0	1,112.4	27.63	41.260	
5,400.0	5,329.8	5,409.6	5,323.8	17.0	17.9	131.14	-317.1	-801.4	1,152.1	1,124.1	28.05	41.068	
5,500.0	5,428.2	5,508.0	5,422.2	17.4	18.0	131.76	-317.5	-802.2	1,164.5	1,136.0	28.48	40.892	
5,600.0	5,526.7	5,606.5	5,520.7	17.7	18.1	132.37	-318.0	-802.9	1,176.9	1,148.0	28.89	40.732	
5,700.0	5,625.1	5,704.9	5,619.1	18.1	18.2	132.96	-318.4	-803.6	1,189.5	1,160.2	29.31	40.588	
5,800.0	5,723.5	5,803.4	5,717.6	18.4	18.3	133.54	-318.8	-804.4	1,202.2	1,172.5	29.71	40.458	
5,900.0	5,821.9	5,901.8	5,816.0	18.8	18.4	134.10	-319.2	-805.1	1,215.0	1,184.9	30.12	40.341	
6,000.0	5,920.4	6,000.3	5,914.5	19.2	18.5	134.66	-319.7	-805.8	1,228.0	1,197.5	30.52	40.237	
6,100.0	6,018.8	6,098.7	6,012.9	19.5	18.6	135.20	-320.1	-806.6	1,241.0	1,210.1	30.91	40.144	
6,200.0	6,117.2	6,197.2	6,111.4	19.9	18.7	135.73	-320.5	-807.3	1,254.2	1,222.9	31.31	40.061	
6,300.0	6,215.6	6,295.6	6,209.8	20.2	18.8	136.26	-320.9	-808.1	1,267.5	1,235.8	31.70	39.989	
6,400.0	6,314.1	6,394.1	6,308.2	20.6	18.9	136.77	-321.4	-808.8	1,280.8	1,248.8	32.08	39.926	
6,500.0	6,412.5	6,492.6	6,406.7	20.9	19.1	137.31	-321.8	-809.5	1,294.2	1,261.7	32.48	39.847	
6,600.0	6,511.4	6,591.5	6,505.6	21.2	19.2	137.88	-322.2	-810.3	1,305.8	1,272.9	32.89	39.705	
6,700.0	6,610.7	6,690.8	6,604.9	21.4	19.3	138.31	-322.6	-811.0	1,314.8	1,281.6	33.25	39.539	
6,800.0	6,710.4	6,790.5	6,704.6	21.6	19.4	138.59	-323.1	-811.7	1,321.3	1,287.7	33.58	39.346	
6,900.0	6,810.3	6,890.4	6,804.5	21.8	19.5	138.74	-323.5	-812.5	1,325.1	1,291.3	33.87	39.124	
7,000.0	6,910.3	6,990.4	6,904.5	21.9	19.6	59.74	-323.9	-813.2	1,326.4	1,292.3	34.13	38.866	
7,100.0	7,010.3	7,090.4	7,004.5	22.0	19.8	59.72	-324.3	-814.0	1,326.7	1,292.3	34.39	38.575	
7,200.0	7,110.3	7,190.4	7,104.5	22.1	19.9	59.71	-324.8	-814.7	1,326.8	1,292.1	34.66	38.276	
7,300.0	7,210.2	7,290.4	7,204.5	22.2	20.0	59.72	-325.2	-815.5	1,326.6	1,291.7	34.94	37.970	
7,400.0	7,310.2	7,390.4	7,304.5	22.3	20.1	59.75	-325.6	-816.2	1,326.3	1,291.1	35.22	37.663	
7,500.0	7,410.2	7,490.4	7,404.5	22.4	20.3	59.77	-326.1	-817.0	1,326.0	1,290.5	35.49	37.360	
7,600.0	7,510.2	7,590.4	7,504.5	22.5	20.4	59.79	-326.5	-817.7	1,325.7	1,290.0	35.77	37.059	
7,700.0	7,610.2	7,690.4	7,604.5	22.6	20.5	59.81	-326.9	-818.4	1,325.5	1,289.4	36.05	36.762	
7,800.0	7,710.2	7,790.4	7,704.5	22.7	20.6	59.83	-327.4	-819.2	1,325.2	1,288.8	36.34	36.469	
7,900.0	7,810.2	7,890.4	7,804.4	22.8	20.8	59.85	-327.8	-819.9	1,324.9	1,288.3	36.62	36.179	
8,000.0	7,910.2	7,990.3	7,904.4	22.9	20.9	59.88	-328.2	-820.7	1,324.6	1,287.7	36.90	35.892	
8,100.0	8,010.2	8,090.3	8,004.4	23.0	21.0	59.90	-328.6	-821.4	1,324.3	1,287.1	37.19	35.609	
8,200.0	8,110.2	8,190.3	8,104.4	23.1	21.1	59.92	-329.1	-822.2	1,324.0	1,286.5	37.48	35.328	
8,300.0	8,210.1	8,290.3	8,204.4	23.3	21.3	59.94	-329.5	-822.9	1,323.7	1,286.0	37.77	35.051	
8,400.0	8,310.1	8,390.3	8,304.4	23.4	21.4	59.96	-329.9	-823.7	1,323.4	1,285.4	38.05	34.778	
8,500.0	8,410.1	8,490.3	8,404.4	23.5	21.5	59.98	-330.4	-824.4	1,323.2	1,284.8	38.34	34.507	
8,600.0	8,510.1	8,590.3	8,504.4	23.6	21.7	60.01	-330.8	-825.2	1,322.9	1,284.2	38.64	34.240	
8,700.0	8,610.1	8,690.3	8,604.4	23.7	21.8	60.03	-331.2	-825.9	1,322.6	1,283.7	38.93	33.976	
8,800.0	8,710.1	8,790.3	8,704.4	23.8	21.9	60.05	-331.7	-826.6	1,322.3	1,283.1	39.22	33.714	
8,900.0	8,810.1	8,890.3	8,804.4	23.9	22.0	60.07	-332.1	-827.4	1,322.0	1,282.5	39.51	33.456	
9,000.0	8,910.1	8,990.3	8,904.4	24.1	22.2	60.09	-332.5	-828.1	1,321.7	1,281.9	39.81	33.201	
9,100.0	9,010.1	9,090.3	9,004.4	24.2	22.3	60.11	-332.9	-828.9	1,321.4	1,281.3	40.11	32.949	
9,200.0	9,110.1	9,190.3	9,104.4	24.3	22.5	60.13	-333.4	-829.6	1,321.2	1,280.8	40.40	32.700	
9,300.0	9,210.0	9,290.3	9,204.4	24.4	22.6	60.16	-333.8	-830.4	1,320.9	1,280.2	40.70	32.454	
9,400.0	9,310.0	9,390.3	9,304.4	24.5	22.7	60.18	-334.2	-831.1	1,320.6	1,279.6	41.00	32.211	
9,500.0	9,410.0	9,490.3	9,404.4	24.7	22.9	60.20	-334.7	-831.9	1,320.3	1,279.0	41.30	31.971	
9,600.0	9,510.0	9,590.3	9,504.4	24.8	23.0	60.22	-335.1	-832.6	1,320.0	1,278.4	41.60	31.734	
9,700.0	9,610.0	9,690.3	9,604.4	24.9	23.1	60.24	-335.5	-833.4	1,319.7	1,277.8	41.90	31.499	
9,800.0	9,710.0	9,790.3	9,704.3	25.0	23.3	60.26	-336.0	-834.1	1,319.4	1,277.2	42.20	31.267	
9,900.0	9,810.0	9,890.3	9,804.3	25.2	23.4	60.29	-336.4	-834.8	1,319.2	1,276.7	42.50	31.038	
9,931.0	9,841.0	9,921.3	9,835.4	25.2	23.5	60.29	-336.5	-835.1	1,319.1	1,276.5	42.60	30.967	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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) - OM07A 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	
300.0	300.0	300.0	300.0	0.5	0.5	-150.54	-17.5	-9.9	20.1	19.1	0.99	20.184	
400.0	400.0	400.0	400.0	0.7	0.7	-150.54	-17.5	-9.9	20.1	18.7	1.34	14.941	
500.0	500.0	500.0	500.0	0.8	0.8	-150.54	-17.5	-9.9	20.1	18.4	1.69	11.860	CC, ES
600.0	600.0	599.3	599.3	1.0	1.0	-148.63	-18.5	-11.3	21.7	19.6	2.04	10.615	SF
700.0	700.0	698.4	698.3	1.2	1.2	57.90	-21.5	-15.5	25.6	23.2	2.39	10.693	
800.0	799.8	797.1	796.5	1.4	1.4	69.86	-26.5	-22.4	31.8	29.1	2.75	11.593	
900.0	899.5	895.0	893.8	1.6	1.6	81.77	-33.3	-32.0	41.8	38.7	3.13	13.388	
1,000.0	998.7	992.3	989.9	1.8	1.9	91.32	-42.1	-44.1	56.2	52.6	3.55	15.827	
1,100.0	1,097.5	1,090.5	1,086.7	2.1	2.2	99.16	-51.6	-57.3	73.1	69.0	4.04	18.086	
1,200.0	1,195.9	1,188.4	1,183.2	2.4	2.5	105.43	-61.0	-70.5	91.4	86.8	4.56	20.035	
1,300.0	1,294.3	1,286.3	1,279.8	2.7	2.8	109.62	-70.5	-83.6	110.4	105.3	5.10	21.651	
1,400.0	1,392.7	1,384.2	1,376.4	3.0	3.1	112.57	-79.9	-96.8	129.9	124.2	5.65	22.988	
1,500.0	1,491.2	1,482.1	1,472.9	3.4	3.4	114.75	-89.4	-110.0	149.6	143.4	6.21	24.100	
1,600.0	1,589.6	1,580.0	1,569.5	3.7	3.8	116.43	-98.8	-123.1	169.4	162.6	6.77	25.034	
1,700.0	1,688.0	1,677.9	1,666.0	4.0	4.1	117.75	-108.3	-136.3	189.4	182.0	7.33	25.826	
1,800.0	1,786.5	1,775.8	1,762.6	4.4	4.4	118.82	-117.7	-149.5	209.4	201.5	7.90	26.505	
1,900.0	1,884.9	1,873.7	1,859.1	4.7	4.7	119.70	-127.2	-162.6	229.5	221.0	8.47	27.092	
2,000.0	1,983.3	1,971.6	1,955.7	5.1	5.1	120.44	-136.6	-175.8	249.6	240.6	9.04	27.605	
2,100.0	2,081.7	2,069.5	2,052.2	5.4	5.4	121.07	-146.1	-189.0	269.8	260.2	9.62	28.055	
2,200.0	2,180.2	2,167.4	2,148.8	5.8	5.7	121.62	-155.6	-202.1	290.0	279.8	10.19	28.454	
2,300.0	2,278.6	2,265.3	2,245.3	6.1	6.0	122.09	-165.0	-215.3	310.2	299.4	10.77	28.810	
2,400.0	2,377.0	2,363.2	2,341.9	6.5	6.4	122.50	-174.5	-228.5	330.5	319.1	11.34	29.128	
2,500.0	2,475.4	2,461.1	2,438.4	6.8	6.7	122.87	-183.9	-241.6	350.7	338.8	11.92	29.416	
2,600.0	2,573.9	2,559.0	2,535.0	7.2	7.0	123.19	-193.4	-254.8	371.0	358.5	12.50	29.676	
2,700.0	2,672.3	2,656.9	2,631.6	7.5	7.4	123.49	-202.8	-268.0	391.2	378.2	13.08	29.912	
2,800.0	2,770.7	2,754.8	2,728.1	7.9	7.7	123.75	-212.3	-281.1	411.5	397.9	13.66	30.129	
2,900.0	2,869.1	2,852.7	2,824.7	8.2	8.0	123.99	-221.7	-294.3	431.8	417.6	14.24	30.327	
3,000.0	2,967.6	2,950.6	2,921.2	8.6	8.3	124.21	-231.2	-307.5	452.1	437.3	14.82	30.509	
3,100.0	3,066.0	3,048.6	3,017.8	8.9	8.7	124.41	-240.7	-320.6	472.4	457.0	15.40	30.677	
3,200.0	3,164.4	3,146.5	3,114.3	9.3	9.0	124.59	-250.1	-333.8	492.7	476.7	15.98	30.833	
3,300.0	3,262.8	3,244.4	3,210.9	9.6	9.3	124.76	-259.6	-347.0	513.0	496.5	16.56	30.978	
3,400.0	3,361.3	3,342.3	3,307.4	10.0	9.7	124.91	-269.0	-360.1	533.4	516.2	17.14	31.113	
3,500.0	3,459.7	3,440.2	3,404.0	10.3	10.0	125.06	-278.5	-373.3	553.7	535.9	17.72	31.238	
3,600.0	3,558.1	3,538.1	3,500.5	10.7	10.3	125.19	-287.9	-386.4	574.0	555.7	18.31	31.356	
3,700.0	3,656.6	3,636.0	3,597.1	11.0	10.7	125.31	-297.4	-399.6	594.3	575.4	18.89	31.466	
3,800.0	3,755.0	3,733.9	3,693.6	11.4	11.0	125.43	-306.8	-412.8	614.6	595.2	19.47	31.569	
3,900.0	3,853.4	3,831.8	3,790.2	11.7	11.3	125.54	-316.3	-425.9	635.0	614.9	20.05	31.666	
4,000.0	3,951.8	3,929.7	3,886.7	12.1	11.7	125.64	-325.8	-439.1	655.3	634.7	20.63	31.758	
4,100.0	4,050.3	4,027.6	3,983.3	12.4	12.0	125.74	-335.2	-452.3	675.6	654.4	21.22	31.845	
4,200.0	4,148.7	4,125.5	4,079.9	12.8	12.3	125.83	-344.7	-465.4	696.0	674.2	21.80	31.926	
4,300.0	4,247.1	4,223.4	4,176.4	13.1	12.6	125.91	-354.1	-478.6	716.3	693.9	22.38	32.004	
4,400.0	4,345.5	4,321.3	4,273.0	13.5	13.0	125.99	-363.6	-491.8	736.7	713.7	22.97	32.077	
4,500.0	4,444.0	4,419.2	4,369.5	13.8	13.3	126.07	-373.0	-504.9	757.0	733.4	23.55	32.147	
4,600.0	4,542.4	4,517.1	4,466.1	14.2	13.6	126.14	-382.5	-518.1	777.3	753.2	24.13	32.213	
4,700.0	4,640.8	4,615.0	4,562.6	14.6	14.0	126.21	-391.9	-531.3	797.7	773.0	24.71	32.277	
4,800.0	4,739.2	4,712.9	4,659.2	14.9	14.3	126.27	-401.4	-544.4	818.0	792.7	25.30	32.337	
4,900.0	4,837.7	4,810.8	4,755.7	15.3	14.6	126.34	-410.8	-557.6	838.4	812.5	25.88	32.394	
5,000.0	4,936.1	4,908.7	4,852.3	15.6	15.0	126.40	-420.3	-570.8	858.7	832.3	26.46	32.449	
5,100.0	5,034.5	5,006.6	4,948.8	16.0	15.3	126.45	-429.8	-583.9	879.1	852.0	27.05	32.502	

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 OM08B 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:	OM08B 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) - OM07A 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	5,132.9	5,104.6	5,045.4	16.3	15.6	126.51	-439.2	-597.1	899.4	871.8	27.63	32.552	
5,300.0	5,231.4	5,202.5	5,141.9	16.7	16.0	126.56	-448.7	-610.3	919.8	891.5	28.21	32.600	
5,400.0	5,329.8	5,300.4	5,238.5	17.0	16.3	126.61	-458.1	-623.4	940.1	911.3	28.80	32.646	
5,500.0	5,428.2	5,398.3	5,335.1	17.4	16.6	126.65	-467.6	-636.6	960.5	931.1	29.38	32.690	
5,600.0	5,526.7	5,496.2	5,431.6	17.7	17.0	126.70	-477.0	-649.8	980.8	950.8	29.96	32.733	
5,700.0	5,625.1	5,594.1	5,528.2	18.1	17.3	126.74	-486.5	-662.9	1,001.2	970.6	30.55	32.774	
5,800.0	5,723.5	5,692.0	5,624.7	18.4	17.6	126.78	-495.9	-676.1	1,021.5	990.4	31.13	32.813	
5,900.0	5,821.9	5,789.9	5,721.3	18.8	18.0	126.82	-505.4	-689.3	1,041.9	1,010.1	31.71	32.851	
6,000.0	5,920.4	5,887.8	5,817.8	19.2	18.3	126.86	-514.9	-702.4	1,062.2	1,029.9	32.30	32.887	
6,100.0	6,018.8	5,985.7	5,914.4	19.5	18.6	126.90	-524.3	-715.6	1,082.6	1,049.7	32.88	32.922	
6,200.0	6,117.2	6,083.6	6,010.9	19.9	19.0	126.93	-533.8	-728.7	1,102.9	1,069.4	33.47	32.956	
6,300.0	6,215.6	6,181.5	6,107.5	20.2	19.3	126.97	-543.2	-741.9	1,123.3	1,089.2	34.05	32.989	
6,400.0	6,314.1	6,279.4	6,204.0	20.6	19.6	127.00	-552.7	-755.1	1,143.6	1,109.0	34.63	33.021	
6,500.0	6,412.5	6,377.3	6,300.6	20.9	20.0	127.12	-562.1	-768.2	1,163.9	1,128.7	35.23	33.036	
6,600.0	6,511.4	6,475.5	6,397.5	21.2	20.3	127.35	-571.6	-781.5	1,182.6	1,146.8	35.82	33.014	
6,700.0	6,610.7	6,602.9	6,523.4	21.4	20.7	127.42	-582.5	-796.6	1,198.2	1,161.8	36.40	32.914	
6,800.0	6,710.4	6,734.6	6,654.4	21.6	20.9	127.48	-590.3	-807.5	1,209.1	1,172.2	36.88	32.787	
6,900.0	6,810.3	6,867.3	6,786.9	21.8	21.1	127.51	-594.7	-813.6	1,215.1	1,177.9	37.24	32.630	
7,000.0	6,910.3	6,989.7	6,909.3	21.9	21.3	48.51	-595.6	-814.8	1,216.5	1,179.0	37.50	32.439	
7,100.0	7,010.3	7,086.3	7,005.9	22.0	21.4	48.51	-595.8	-815.1	1,216.5	1,178.8	37.74	32.238	
7,200.0	7,110.3	7,182.9	7,102.4	22.1	21.5	48.51	-596.1	-815.8	1,216.6	1,178.6	37.98	32.032	
7,300.0	7,210.2	7,279.5	7,199.0	22.2	21.6	48.51	-596.7	-816.7	1,216.6	1,178.3	38.23	31.820	
7,303.2	7,213.5	7,282.6	7,202.2	22.2	21.6	48.51	-596.7	-816.8	1,216.6	1,178.3	38.24	31.813	
7,400.0	7,310.2	7,379.1	7,298.6	22.3	21.7	48.51	-597.4	-818.0	1,216.6	1,178.1	38.49	31.605	
7,500.0	7,410.2	7,479.1	7,398.6	22.4	21.9	48.51	-598.1	-819.2	1,216.6	1,177.8	38.75	31.391	
7,600.0	7,510.2	7,579.1	7,498.6	22.5	22.0	48.51	-598.8	-820.5	1,216.6	1,177.5	39.02	31.179	
7,700.0	7,610.2	7,679.1	7,598.6	22.6	22.1	48.51	-599.5	-821.7	1,216.6	1,177.3	39.28	30.969	
7,800.0	7,710.2	7,779.1	7,698.6	22.7	22.2	48.51	-600.3	-823.0	1,216.6	1,177.0	39.55	30.761	
7,900.0	7,810.2	7,879.1	7,798.6	22.8	22.4	48.51	-601.0	-824.2	1,216.6	1,176.8	39.82	30.555	
8,000.0	7,910.2	7,979.1	7,898.6	22.9	22.5	48.51	-601.7	-825.4	1,216.6	1,176.5	40.09	30.350	
8,100.0	8,010.2	8,079.1	7,998.6	23.0	22.6	48.51	-602.4	-826.7	1,216.6	1,176.2	40.35	30.147	
8,200.0	8,110.2	8,179.1	8,098.5	23.1	22.7	48.51	-603.1	-827.9	1,216.6	1,176.0	40.63	29.946	
8,300.0	8,210.1	8,279.1	8,198.5	23.3	22.9	48.51	-603.8	-829.2	1,216.6	1,175.7	40.90	29.746	
8,400.0	8,310.1	8,379.1	8,298.5	23.4	23.0	48.51	-604.6	-830.4	1,216.6	1,175.4	41.17	29.549	
8,500.0	8,410.1	8,479.1	8,398.5	23.5	23.1	48.51	-605.3	-831.7	1,216.6	1,175.1	41.45	29.353	
8,600.0	8,510.1	8,579.1	8,498.5	23.6	23.3	48.51	-606.0	-832.9	1,216.6	1,174.9	41.72	29.159	
8,700.0	8,610.1	8,679.1	8,598.5	23.7	23.4	48.51	-606.7	-834.2	1,216.6	1,174.6	42.00	28.967	
8,800.0	8,710.1	8,779.1	8,698.5	23.8	23.5	48.51	-607.4	-835.4	1,216.6	1,174.3	42.28	28.776	
8,900.0	8,810.1	8,879.1	8,798.5	23.9	23.7	48.51	-608.1	-836.7	1,216.6	1,174.0	42.56	28.587	
9,000.0	8,910.1	8,979.1	8,898.5	24.1	23.8	48.51	-608.9	-837.9	1,216.6	1,173.8	42.84	28.400	
9,100.0	9,010.1	9,079.1	8,998.5	24.2	23.9	48.51	-609.6	-839.1	1,216.6	1,173.5	43.12	28.215	
9,200.0	9,110.1	9,179.1	9,098.4	24.3	24.1	48.51	-610.3	-840.4	1,216.6	1,173.2	43.40	28.032	
9,300.0	9,210.0	9,279.1	9,198.4	24.4	24.2	48.51	-611.0	-841.6	1,216.6	1,172.9	43.68	27.850	
9,400.0	9,310.0	9,379.1	9,298.4	24.5	24.3	48.51	-611.7	-842.9	1,216.6	1,172.7	43.97	27.670	
9,500.0	9,410.0	9,479.1	9,398.4	24.7	24.5	48.51	-612.4	-844.1	1,216.6	1,172.4	44.25	27.492	
9,600.0	9,510.0	9,579.1	9,498.4	24.8	24.6	48.51	-613.2	-845.4	1,216.6	1,172.1	44.54	27.315	
9,700.0	9,610.0	9,679.1	9,598.4	24.9	24.7	48.51	-613.9	-846.6	1,216.6	1,171.8	44.83	27.140	
9,800.0	9,710.0	9,779.1	9,698.4	25.0	24.9	48.51	-614.6	-847.9	1,216.6	1,171.5	45.12	26.967	
9,900.0	9,810.0	9,879.1	9,798.4	25.2	25.0	48.51	-615.3	-849.1	1,216.6	1,171.2	45.40	26.796	
9,931.0	9,841.0	9,910.1	9,829.4	25.2	25.1	48.51	-615.5	-849.5	1,216.6	1,171.1	45.49	26.743	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	-150.78	-26.2	-14.7	30.1				
100.0	100.0	100.0	100.0	0.1	0.1	-150.78	-26.2	-14.7	30.1	29.8	0.30	101.279	
200.0	200.0	200.0	200.0	0.3	0.3	-150.78	-26.2	-14.7	30.1	29.4	0.65	46.534	
300.0	300.0	300.0	300.0	0.5	0.5	-150.78	-26.2	-14.7	30.1	29.1	0.99	30.206	
400.0	400.0	400.0	400.0	0.7	0.7	-150.78	-26.2	-14.7	30.1	28.7	1.34	22.360	CC, ES
500.0	500.0	499.0	499.0	0.8	0.8	-149.84	-27.4	-15.9	31.7	30.0	1.69	18.745	
600.0	600.0	597.7	597.5	1.0	1.0	-147.56	-30.9	-19.6	36.7	34.7	2.04	18.002	SF
700.0	700.0	696.0	695.5	1.2	1.2	55.88	-36.7	-25.8	44.1	41.7	2.39	18.470	
800.0	799.8	793.8	792.5	1.4	1.5	62.49	-44.7	-34.4	53.4	50.6	2.74	19.487	
900.0	899.5	890.7	888.4	1.6	1.8	69.66	-54.9	-45.2	65.3	62.2	3.11	20.988	
1,000.0	998.7	986.8	982.7	1.8	2.1	76.37	-67.2	-58.3	80.5	76.9	3.53	22.788	
1,100.0	1,097.5	1,083.6	1,077.3	2.1	2.5	82.41	-81.4	-73.3	98.5	94.4	4.02	24.473	
1,200.0	1,195.9	1,181.3	1,172.7	2.4	2.8	87.78	-95.8	-88.7	117.4	112.8	4.57	25.699	
1,300.0	1,294.3	1,279.0	1,268.1	2.7	3.2	91.67	-110.2	-104.0	137.1	131.9	5.14	26.644	
1,400.0	1,392.7	1,376.7	1,363.5	3.0	3.6	94.59	-124.6	-119.3	157.2	151.5	5.74	27.382	
1,500.0	1,491.2	1,474.4	1,458.9	3.4	4.0	96.84	-139.0	-134.6	177.7	171.3	6.35	27.970	
1,600.0	1,589.6	1,572.0	1,554.3	3.7	4.4	98.62	-153.4	-149.9	198.3	191.3	6.97	28.447	
1,700.0	1,688.0	1,669.7	1,649.7	4.0	4.8	100.07	-167.8	-165.3	219.1	211.5	7.60	28.840	
1,800.0	1,786.5	1,767.4	1,745.0	4.4	5.2	101.27	-182.2	-180.6	240.0	231.8	8.23	29.170	
1,900.0	1,884.9	1,865.1	1,840.4	4.7	5.6	102.27	-196.6	-195.9	261.0	252.2	8.86	29.450	
2,000.0	1,983.3	1,962.7	1,935.8	5.1	6.0	103.13	-211.0	-211.2	282.1	272.6	9.50	29.690	
2,100.0	2,081.7	2,060.4	2,031.2	5.4	6.4	103.87	-225.4	-226.5	303.2	293.1	10.14	29.899	
2,200.0	2,180.2	2,158.1	2,126.6	5.8	6.8	104.51	-239.8	-241.8	324.4	313.6	10.78	30.082	
2,300.0	2,278.6	2,255.8	2,222.0	6.1	7.2	105.07	-254.1	-257.2	345.5	334.1	11.43	30.243	
2,400.0	2,377.0	2,353.4	2,317.4	6.5	7.6	105.57	-268.5	-272.5	366.8	354.7	12.07	30.387	
2,500.0	2,475.4	2,451.1	2,412.8	6.8	8.0	106.01	-282.9	-287.8	388.0	375.3	12.72	30.515	
2,600.0	2,573.9	2,548.8	2,508.1	7.2	8.4	106.41	-297.3	-303.1	409.3	395.9	13.36	30.631	
2,700.0	2,672.3	2,646.5	2,603.5	7.5	8.8	106.77	-311.7	-318.4	430.5	416.5	14.01	30.735	
2,800.0	2,770.7	2,744.1	2,698.9	7.9	9.2	107.09	-326.1	-333.7	451.8	437.2	14.66	30.830	
2,900.0	2,869.1	2,841.8	2,794.3	8.2	9.6	107.39	-340.5	-349.1	473.1	457.8	15.30	30.917	
3,000.0	2,967.6	2,939.5	2,889.7	8.6	10.0	107.65	-354.9	-364.4	494.5	478.5	15.95	30.997	
3,100.0	3,066.0	3,037.2	2,985.1	8.9	10.5	107.90	-369.3	-379.7	515.8	499.2	16.60	31.070	
3,200.0	3,164.4	3,134.9	3,080.5	9.3	10.9	108.13	-383.7	-395.0	537.1	519.9	17.25	31.137	
3,300.0	3,262.8	3,232.5	3,175.9	9.6	11.3	108.34	-398.1	-410.3	558.5	540.6	17.90	31.200	
3,400.0	3,361.3	3,330.2	3,271.2	10.0	11.7	108.54	-412.5	-425.7	579.8	561.3	18.55	31.258	
3,500.0	3,459.7	3,427.9	3,366.6	10.3	12.1	108.72	-426.9	-441.0	601.2	582.0	19.20	31.312	
3,600.0	3,558.1	3,525.6	3,462.0	10.7	12.5	108.88	-441.3	-456.3	622.5	602.7	19.85	31.362	
3,700.0	3,656.6	3,623.2	3,557.4	11.0	12.9	109.04	-455.7	-471.6	643.9	623.4	20.50	31.409	
3,800.0	3,755.0	3,720.9	3,652.8	11.4	13.3	109.19	-470.1	-486.9	665.3	644.1	21.15	31.453	
3,900.0	3,853.4	3,818.6	3,748.2	11.7	13.7	109.33	-484.5	-502.2	686.6	664.8	21.80	31.495	
4,000.0	3,951.8	3,916.3	3,843.6	12.1	14.1	109.46	-498.9	-517.6	708.0	685.6	22.45	31.534	
4,100.0	4,050.3	4,013.9	3,938.9	12.4	14.5	109.58	-513.3	-532.9	729.4	706.3	23.10	31.571	
4,200.0	4,148.7	4,111.6	4,034.3	12.8	14.9	109.69	-527.7	-548.2	750.8	727.0	23.75	31.605	
4,300.0	4,247.1	4,209.3	4,129.7	13.1	15.3	109.80	-542.1	-563.5	772.2	747.8	24.41	31.638	
4,400.0	4,345.5	4,307.0	4,225.1	13.5	15.7	109.91	-556.5	-578.8	793.6	768.5	25.06	31.669	
4,500.0	4,444.0	4,404.6	4,320.5	13.8	16.2	110.00	-570.9	-594.1	814.9	789.2	25.71	31.699	
4,600.0	4,542.4	4,502.3	4,415.9	14.2	16.6	110.10	-585.3	-609.5	836.3	810.0	26.36	31.727	
4,700.0	4,640.8	4,600.0	4,511.3	14.6	17.0	110.18	-599.7	-624.8	857.7	830.7	27.01	31.753	
4,800.0	4,739.2	4,697.7	4,606.7	14.9	17.4	110.27	-614.1	-640.1	879.1	851.5	27.66	31.779	
4,900.0	4,837.7	4,795.3	4,702.0	15.3	17.8	110.35	-628.5	-655.4	900.5	872.2	28.32	31.803	
5,000.0	4,936.1	4,893.0	4,797.4	15.6	18.2	110.42	-642.9	-670.7	921.9	893.0	28.97	31.826	
5,100.0	5,034.5	4,990.7	4,892.8	16.0	18.6	110.50	-657.3	-686.1	943.3	913.7	29.62	31.848	

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 OM08B 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:	OM08B 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	5,132.9	5,088.4	4,988.2	16.3	19.0	110.57	-671.7	-701.4	964.7	934.5	30.27	31.869	
5,300.0	5,231.4	5,186.1	5,083.6	16.7	19.4	110.63	-686.1	-716.7	986.1	955.2	30.92	31.889	
5,400.0	5,329.8	5,283.7	5,179.0	17.0	19.8	110.70	-700.5	-732.0	1,007.5	976.0	31.58	31.909	
5,500.0	5,428.2	5,381.4	5,274.4	17.4	20.2	110.76	-714.9	-747.3	1,028.9	996.7	32.23	31.927	
5,600.0	5,526.7	5,479.1	5,369.8	17.7	20.6	110.82	-729.3	-762.6	1,050.4	1,017.5	32.88	31.945	
5,700.0	5,625.1	5,576.8	5,465.1	18.1	21.1	110.87	-743.7	-778.0	1,071.8	1,038.2	33.53	31.962	
5,800.0	5,723.5	5,674.4	5,560.5	18.4	21.5	110.92	-758.1	-793.3	1,093.2	1,059.0	34.18	31.979	
5,900.0	5,821.9	5,772.1	5,655.9	18.8	21.9	110.98	-772.5	-808.6	1,114.6	1,079.7	34.84	31.994	
6,000.0	5,920.4	5,869.8	5,751.3	19.2	22.3	111.03	-786.9	-823.9	1,136.0	1,100.5	35.49	32.010	
6,100.0	6,018.8	5,967.5	5,846.7	19.5	22.7	111.07	-801.3	-839.2	1,157.4	1,121.3	36.14	32.024	
6,200.0	6,117.2	6,065.1	5,942.1	19.9	23.1	111.12	-815.7	-854.5	1,178.8	1,142.0	36.79	32.038	
6,300.0	6,215.6	6,162.8	6,037.5	20.2	23.5	111.17	-830.1	-869.9	1,200.2	1,162.8	37.45	32.052	
6,400.0	6,314.1	6,260.5	6,132.9	20.6	23.9	111.21	-844.4	-885.2	1,221.6	1,183.5	38.10	32.065	
6,500.0	6,412.5	6,358.2	6,228.3	20.9	24.3	111.36	-858.8	-900.5	1,243.0	1,204.2	38.77	32.058	
6,600.0	6,511.4	6,489.3	6,356.7	21.2	24.8	111.69	-876.8	-919.6	1,262.4	1,222.9	39.51	31.951	
6,700.0	6,610.7	6,631.7	6,497.4	21.4	25.2	111.94	-891.7	-935.5	1,277.3	1,237.2	40.15	31.818	
6,800.0	6,710.4	6,775.6	6,640.5	21.6	25.5	112.13	-901.9	-946.3	1,287.5	1,246.9	40.65	31.673	
6,900.0	6,810.3	6,920.4	6,785.1	21.8	25.7	112.25	-907.2	-952.0	1,293.0	1,251.9	41.02	31.518	
7,000.0	6,910.3	7,043.6	6,908.3	21.9	25.8	33.28	-908.0	-952.9	1,294.0	1,252.7	41.27	31.356	
7,100.0	7,010.3	7,139.1	7,003.8	22.0	25.9	33.27	-908.2	-953.2	1,294.0	1,252.5	41.48	31.197	
7,200.0	7,110.3	7,234.5	7,099.2	22.1	26.0	33.27	-908.6	-953.8	1,294.1	1,252.4	41.70	31.034	
7,300.0	7,210.2	7,330.0	7,194.7	22.2	26.1	33.27	-909.2	-954.9	1,294.1	1,252.2	41.93	30.867	
7,400.0	7,310.2	7,430.0	7,294.7	22.3	26.2	33.27	-909.9	-956.1	1,294.1	1,252.0	42.16	30.695	
7,500.0	7,410.2	7,530.0	7,394.7	22.4	26.3	33.27	-910.6	-957.4	1,294.1	1,251.7	42.40	30.524	
7,600.0	7,510.2	7,630.0	7,494.7	22.5	26.4	33.27	-911.4	-958.6	1,294.1	1,251.5	42.63	30.354	
7,700.0	7,610.2	7,730.0	7,594.6	22.6	26.5	33.27	-912.1	-959.8	1,294.1	1,251.3	42.87	30.184	
7,800.0	7,710.2	7,830.0	7,694.6	22.7	26.7	33.27	-912.8	-961.1	1,294.1	1,251.0	43.12	30.016	
7,900.0	7,810.2	7,930.0	7,794.6	22.8	26.8	33.27	-913.5	-962.3	1,294.1	1,250.8	43.36	29.848	
8,000.0	7,910.2	8,030.0	7,894.6	22.9	26.9	33.27	-914.2	-963.6	1,294.1	1,250.5	43.60	29.681	
8,100.0	8,010.2	8,130.0	7,994.6	23.0	27.0	33.27	-915.0	-964.8	1,294.1	1,250.3	43.85	29.515	
8,200.0	8,110.2	8,230.0	8,094.6	23.1	27.1	33.27	-915.7	-966.1	1,294.1	1,250.1	44.09	29.350	
8,300.0	8,210.1	8,330.0	8,194.6	23.3	27.2	33.27	-916.4	-967.3	1,294.2	1,249.8	44.34	29.186	
8,400.0	8,310.1	8,430.0	8,294.6	23.4	27.3	33.27	-917.1	-968.6	1,294.2	1,249.6	44.59	29.022	
8,500.0	8,410.1	8,530.0	8,394.6	23.5	27.4	33.27	-917.8	-969.8	1,294.2	1,249.3	44.84	28.860	
8,600.0	8,510.1	8,630.0	8,494.6	23.6	27.6	33.27	-918.6	-971.0	1,294.2	1,249.1	45.09	28.699	
8,700.0	8,610.1	8,730.0	8,594.5	23.7	27.7	33.27	-919.3	-972.3	1,294.2	1,248.8	45.35	28.538	
8,800.0	8,710.1	8,830.0	8,694.5	23.8	27.8	33.27	-920.0	-973.5	1,294.2	1,248.6	45.60	28.379	
8,900.0	8,810.1	8,930.0	8,794.5	23.9	27.9	33.27	-920.7	-974.8	1,294.2	1,248.3	45.86	28.221	
9,000.0	8,910.1	9,030.0	8,894.5	24.1	28.0	33.27	-921.4	-976.0	1,294.2	1,248.0	46.12	28.063	
9,100.0	9,010.1	9,130.0	8,994.5	24.2	28.1	33.27	-922.2	-977.3	1,294.2	1,247.8	46.37	27.907	
9,200.0	9,110.1	9,230.0	9,094.5	24.3	28.3	33.27	-922.9	-978.5	1,294.2	1,247.5	46.63	27.751	
9,300.0	9,210.0	9,330.0	9,194.5	24.4	28.4	33.27	-923.6	-979.8	1,294.2	1,247.3	46.90	27.597	
9,400.0	9,310.0	9,430.0	9,294.5	24.5	28.5	33.27	-924.3	-981.0	1,294.2	1,247.0	47.16	27.444	
9,500.0	9,410.0	9,530.0	9,394.5	24.7	28.6	33.27	-925.0	-982.2	1,294.2	1,246.8	47.42	27.292	
9,600.0	9,510.0	9,630.0	9,494.5	24.8	28.7	33.27	-925.7	-983.5	1,294.2	1,246.5	47.68	27.140	
9,700.0	9,610.0	9,730.0	9,594.4	24.9	28.9	33.27	-926.5	-984.7	1,294.2	1,246.2	47.95	26.990	
9,800.0	9,710.0	9,830.0	9,694.4	25.0	29.0	33.27	-927.2	-986.0	1,294.2	1,246.0	48.22	26.841	
9,900.0	9,810.0	9,930.0	9,794.4	25.2	29.1	33.27	-927.9	-987.2	1,294.2	1,245.7	48.48	26.693	
9,910.5	9,820.5	9,940.5	9,805.0	25.2	29.1	33.27	-928.0	-987.4	1,294.2	1,245.7	48.51	26.678	
9,931.0	9,841.0	9,951.6	9,816.0	25.2	29.1	33.27	-928.1	-987.5	1,294.2	1,245.7	48.55	26.655	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	-150.48	-43.3	-24.5	49.8				
100.0	100.0	100.0	100.0	0.1	0.1	-150.48	-43.3	-24.5	49.8	49.5	0.30	167.896	
200.0	200.0	200.0	200.0	0.3	0.3	-150.48	-43.3	-24.5	49.8	49.2	0.65	77.142	
300.0	300.0	300.0	300.0	0.5	0.5	-150.48	-43.3	-24.5	49.8	48.8	0.99	50.074	CC, ES
400.0	400.0	398.3	398.3	0.7	0.7	-150.13	-44.6	-25.6	51.5	50.2	1.34	38.406	
500.0	500.0	496.3	496.2	0.8	0.9	-149.20	-48.5	-28.9	56.6	54.9	1.69	33.526	
600.0	600.0	593.9	593.4	1.0	1.1	-147.98	-54.8	-34.3	65.0	63.0	2.03	31.965	
700.0	700.0	690.9	689.7	1.2	1.3	53.19	-63.7	-41.8	75.8	73.4	2.38	31.862	
800.0	799.8	787.3	784.9	1.4	1.6	56.67	-74.9	-51.3	88.1	85.3	2.73	32.280	
900.0	899.5	882.8	878.8	1.6	1.9	60.81	-88.4	-62.8	102.2	99.1	3.09	33.043	
1,000.0	998.7	977.4	971.1	1.8	2.3	65.14	-104.2	-76.1	118.6	115.1	3.50	33.940	
1,100.0	1,097.5	1,072.3	1,063.0	2.1	2.7	69.41	-122.1	-91.4	137.5	133.5	3.96	34.699	
1,200.0	1,195.9	1,169.7	1,157.2	2.4	3.2	73.63	-141.2	-107.5	157.2	152.7	4.49	35.013	
1,300.0	1,294.3	1,267.1	1,251.4	2.7	3.6	76.93	-160.2	-123.7	177.5	172.5	5.06	35.120	
1,400.0	1,392.7	1,364.6	1,345.5	3.0	4.1	79.55	-179.3	-139.8	198.4	192.7	5.65	35.109	
1,500.0	1,491.2	1,462.0	1,439.7	3.4	4.6	81.67	-198.4	-156.0	219.5	213.2	6.27	35.036	
1,600.0	1,589.6	1,559.5	1,533.9	3.7	5.0	83.42	-217.4	-172.1	240.9	234.0	6.90	34.935	
1,700.0	1,688.0	1,656.9	1,628.1	4.0	5.5	84.89	-236.5	-188.3	262.4	254.9	7.54	34.823	
1,800.0	1,786.5	1,754.4	1,722.3	4.4	6.0	86.13	-255.5	-204.4	284.1	275.9	8.19	34.711	
1,900.0	1,884.9	1,851.8	1,816.5	4.7	6.4	87.20	-274.6	-220.6	305.9	297.1	8.84	34.602	
2,000.0	1,983.3	1,949.3	1,910.7	5.1	6.9	88.12	-293.6	-236.8	327.8	318.3	9.50	34.499	
2,100.0	2,081.7	2,046.7	2,004.9	5.4	7.4	88.93	-312.7	-252.9	349.8	339.6	10.17	34.404	
2,200.0	2,180.2	2,144.2	2,099.1	5.8	7.8	89.65	-331.7	-269.1	371.8	361.0	10.84	34.316	
2,300.0	2,278.6	2,241.6	2,193.3	6.1	8.3	90.28	-350.8	-285.2	393.9	382.4	11.51	34.235	
2,400.0	2,377.0	2,339.0	2,287.4	6.5	8.8	90.85	-369.8	-301.4	416.0	403.8	12.18	34.160	
2,500.0	2,475.4	2,436.5	2,381.6	6.8	9.2	91.35	-388.9	-317.5	438.2	425.3	12.85	34.091	
2,600.0	2,573.9	2,533.9	2,475.8	7.2	9.7	91.82	-407.9	-333.7	460.3	446.8	13.53	34.028	
2,700.0	2,672.3	2,631.4	2,570.0	7.5	10.2	92.23	-427.0	-349.8	482.5	468.3	14.21	33.970	
2,800.0	2,770.7	2,728.8	2,664.2	7.9	10.7	92.61	-446.0	-366.0	504.8	489.9	14.88	33.916	
2,900.0	2,869.1	2,826.3	2,758.4	8.2	11.1	92.96	-465.1	-382.1	527.0	511.5	15.56	33.866	
3,000.0	2,967.6	2,923.7	2,852.6	8.6	11.6	93.28	-484.1	-398.3	549.3	533.0	16.24	33.820	
3,100.0	3,066.0	3,021.2	2,946.8	8.9	12.1	93.58	-503.2	-414.5	571.6	554.6	16.92	33.777	
3,200.0	3,164.4	3,118.6	3,041.0	9.3	12.5	93.85	-522.2	-430.6	593.9	576.2	17.60	33.738	
3,300.0	3,262.8	3,216.1	3,135.2	9.6	13.0	94.11	-541.3	-446.8	616.2	597.9	18.28	33.701	
3,400.0	3,361.3	3,313.5	3,229.3	10.0	13.5	94.34	-560.3	-462.9	638.5	619.5	18.96	33.666	
3,500.0	3,459.7	3,411.0	3,323.5	10.3	14.0	94.56	-579.4	-479.1	660.8	641.1	19.65	33.634	
3,600.0	3,558.1	3,508.4	3,417.7	10.7	14.4	94.77	-598.4	-495.2	683.1	662.8	20.33	33.603	
3,700.0	3,656.6	3,605.8	3,511.9	11.0	14.9	94.96	-617.5	-511.4	705.5	684.5	21.01	33.575	
3,800.0	3,755.0	3,703.3	3,606.1	11.4	15.4	95.14	-636.5	-527.5	727.8	706.1	21.69	33.548	
3,900.0	3,853.4	3,800.7	3,700.3	11.7	15.8	95.31	-655.6	-543.7	750.2	727.8	22.38	33.523	
4,000.0	3,951.8	3,898.2	3,794.5	12.1	16.3	95.48	-674.6	-559.9	772.5	749.5	23.06	33.499	
4,100.0	4,050.3	3,995.6	3,888.7	12.4	16.8	95.63	-693.7	-576.0	794.9	771.1	23.74	33.476	
4,200.0	4,148.7	4,093.1	3,982.9	12.8	17.3	95.77	-712.7	-592.2	817.3	792.8	24.43	33.455	
4,300.0	4,247.1	4,190.5	4,077.1	13.1	17.7	95.90	-731.8	-608.3	839.6	814.5	25.11	33.435	
4,400.0	4,345.5	4,288.0	4,171.2	13.5	18.2	96.03	-750.8	-624.5	862.0	836.2	25.80	33.416	
4,500.0	4,444.0	4,385.4	4,265.4	13.8	18.7	96.16	-769.9	-640.6	884.4	857.9	26.48	33.398	
4,600.0	4,542.4	4,482.9	4,359.6	14.2	19.2	96.27	-788.9	-656.8	906.8	879.6	27.17	33.380	
4,700.0	4,640.8	4,580.3	4,453.8	14.6	19.6	96.38	-808.0	-672.9	929.2	901.3	27.85	33.364	
4,800.0	4,739.2	4,677.8	4,548.0	14.9	20.1	96.49	-827.0	-689.1	951.6	923.0	28.53	33.348	
4,900.0	4,837.7	4,775.2	4,642.2	15.3	20.6	96.59	-846.1	-705.2	974.0	944.7	29.22	33.333	
5,000.0	4,936.1	4,872.6	4,736.4	15.6	21.0	96.68	-865.2	-721.4	996.4	966.5	29.90	33.319	
5,100.0	5,034.5	4,970.1	4,830.6	16.0	21.5	96.77	-884.2	-737.6	1,018.8	988.2	30.59	33.305	

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 OM08B 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:	OM08B 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	5,132.9	5,067.5	4,924.8	16.3	22.0	96.86	-903.3	-753.7	1,041.2	1,009.9	31.27	33.292	
5,300.0	5,231.4	5,165.0	5,019.0	16.7	22.5	96.95	-922.3	-769.9	1,063.6	1,031.6	31.96	33.280	
5,400.0	5,329.8	5,262.4	5,113.1	17.0	22.9	97.03	-941.4	-786.0	1,086.0	1,053.3	32.64	33.268	
5,500.0	5,428.2	5,359.9	5,207.3	17.4	23.4	97.10	-960.4	-802.2	1,108.4	1,075.1	33.33	33.256	
5,600.0	5,526.7	5,457.3	5,301.5	17.7	23.9	97.18	-979.5	-818.3	1,130.8	1,096.8	34.01	33.245	
5,700.0	5,625.1	5,554.8	5,395.7	18.1	24.4	97.25	-998.5	-834.5	1,153.2	1,118.5	34.70	33.235	
5,800.0	5,723.5	5,652.2	5,489.9	18.4	24.8	97.32	-1,017.6	-850.6	1,175.6	1,140.3	35.38	33.225	
5,900.0	5,821.9	5,749.7	5,584.1	18.8	25.3	97.38	-1,036.6	-866.8	1,198.1	1,162.0	36.07	33.215	
6,000.0	5,920.4	5,847.1	5,678.3	19.2	25.8	97.45	-1,055.7	-882.9	1,220.5	1,183.7	36.76	33.205	
6,100.0	6,018.8	5,944.5	5,772.5	19.5	26.3	97.51	-1,074.7	-899.1	1,242.9	1,205.5	37.44	33.196	
6,200.0	6,117.2	6,042.0	5,866.7	19.9	26.7	97.57	-1,093.8	-915.3	1,265.3	1,227.2	38.13	33.187	
6,300.0	6,215.6	6,139.4	5,960.9	20.2	27.2	97.62	-1,112.8	-931.4	1,287.7	1,248.9	38.81	33.179	
6,400.0	6,314.1	6,236.9	6,055.0	20.6	27.7	97.68	-1,131.9	-947.6	1,310.2	1,270.7	39.50	33.171	
6,500.0	6,412.5	6,350.3	6,164.7	20.9	28.2	97.87	-1,153.8	-966.1	1,332.4	1,292.1	40.26	33.097	
6,600.0	6,511.4	6,503.9	6,314.8	21.2	28.8	98.32	-1,179.0	-987.5	1,351.3	1,310.2	41.11	32.871	
6,700.0	6,610.7	6,659.8	6,468.6	21.4	29.3	98.68	-1,198.3	-1,003.9	1,365.5	1,323.7	41.81	32.663	
6,800.0	6,710.4	6,817.3	6,625.2	21.6	29.6	98.94	-1,211.2	-1,014.9	1,375.1	1,332.7	42.36	32.463	
6,900.0	6,810.3	6,975.8	6,783.4	21.8	29.8	99.11	-1,217.6	-1,020.3	1,379.9	1,337.1	42.76	32.273	
7,000.0	6,910.3	7,100.0	6,907.6	21.9	29.9	20.14	-1,218.4	-1,020.9	1,380.6	1,337.6	43.00	32.104	
7,100.0	7,010.3	7,194.4	7,002.0	22.0	30.0	20.14	-1,218.6	-1,021.3	1,380.7	1,337.5	43.21	31.956	
7,200.0	7,110.3	7,289.1	7,096.6	22.1	30.1	20.14	-1,219.0	-1,022.0	1,380.8	1,337.4	43.41	31.806	
7,300.0	7,210.2	7,384.1	7,191.6	22.2	30.2	20.14	-1,219.6	-1,023.0	1,380.9	1,337.2	43.63	31.652	
7,400.0	7,310.2	7,484.1	7,291.6	22.3	30.3	20.14	-1,220.3	-1,024.3	1,380.9	1,337.0	43.85	31.494	
7,500.0	7,410.2	7,584.1	7,391.6	22.4	30.4	20.14	-1,221.0	-1,025.5	1,380.9	1,336.8	44.07	31.335	
7,600.0	7,510.2	7,684.1	7,491.6	22.5	30.4	20.14	-1,221.7	-1,026.7	1,380.9	1,336.6	44.29	31.178	
7,700.0	7,610.2	7,784.1	7,591.6	22.6	30.5	20.14	-1,222.5	-1,028.0	1,380.9	1,336.3	44.51	31.021	
7,800.0	7,710.2	7,884.1	7,691.6	22.7	30.6	20.14	-1,223.2	-1,029.2	1,380.9	1,336.1	44.74	30.864	
7,900.0	7,810.2	7,984.1	7,791.6	22.8	30.7	20.14	-1,223.9	-1,030.5	1,380.9	1,335.9	44.97	30.708	
8,000.0	7,910.2	8,084.1	7,891.6	22.9	30.8	20.14	-1,224.6	-1,031.7	1,380.9	1,335.7	45.20	30.552	
8,100.0	8,010.2	8,184.1	7,991.6	23.0	30.9	20.14	-1,225.3	-1,033.0	1,380.9	1,335.4	45.43	30.397	
8,200.0	8,110.2	8,284.1	8,091.6	23.1	31.0	20.14	-1,226.1	-1,034.2	1,380.9	1,335.2	45.66	30.242	
8,300.0	8,210.1	8,384.1	8,191.5	23.3	31.1	20.14	-1,226.8	-1,035.4	1,380.9	1,335.0	45.89	30.088	
8,400.0	8,310.1	8,484.1	8,291.5	23.4	31.3	20.14	-1,227.5	-1,036.7	1,380.9	1,334.7	46.13	29.935	
8,500.0	8,410.1	8,584.1	8,391.5	23.5	31.4	20.14	-1,228.2	-1,037.9	1,380.9	1,334.5	46.37	29.782	
8,600.0	8,510.1	8,684.1	8,491.5	23.6	31.5	20.14	-1,228.9	-1,039.2	1,380.9	1,334.3	46.60	29.630	
8,700.0	8,610.1	8,784.1	8,591.5	23.7	31.6	20.14	-1,229.7	-1,040.4	1,380.9	1,334.0	46.84	29.478	
8,800.0	8,710.1	8,884.1	8,691.5	23.8	31.7	20.14	-1,230.4	-1,041.7	1,380.9	1,333.8	47.08	29.328	
8,900.0	8,810.1	8,984.1	8,791.5	23.9	31.8	20.14	-1,231.1	-1,042.9	1,380.9	1,333.5	47.33	29.178	
9,000.0	8,910.1	9,084.1	8,891.5	24.1	31.9	20.14	-1,231.8	-1,044.1	1,380.9	1,333.3	47.57	29.028	
9,100.0	9,010.1	9,184.1	8,991.5	24.2	32.0	20.14	-1,232.5	-1,045.4	1,380.9	1,333.0	47.81	28.880	
9,200.0	9,110.1	9,284.1	9,091.4	24.3	32.1	20.14	-1,233.3	-1,046.6	1,380.9	1,332.8	48.06	28.732	
9,300.0	9,210.0	9,384.1	9,191.4	24.4	32.2	20.14	-1,234.0	-1,047.9	1,380.9	1,332.5	48.31	28.585	
9,400.0	9,310.0	9,484.1	9,291.4	24.5	32.3	20.14	-1,234.7	-1,049.1	1,380.9	1,332.3	48.56	28.438	
9,500.0	9,410.0	9,584.1	9,391.4	24.7	32.4	20.14	-1,235.4	-1,050.3	1,380.9	1,332.0	48.81	28.293	
9,600.0	9,510.0	9,684.1	9,491.4	24.8	32.5	20.14	-1,236.1	-1,051.6	1,380.9	1,331.8	49.06	28.148	
9,700.0	9,610.0	9,784.1	9,591.4	24.9	32.6	20.14	-1,236.8	-1,052.8	1,380.9	1,331.5	49.31	28.004	
9,800.0	9,710.0	9,884.1	9,691.4	25.0	32.8	20.14	-1,237.6	-1,054.1	1,380.9	1,331.3	49.56	27.860	
9,900.0	9,810.0	9,984.1	9,791.4	25.2	32.9	20.14	-1,238.3	-1,055.3	1,380.9	1,331.0	49.82	27.718	
9,914.1	9,824.1	9,998.2	9,805.5	25.2	32.9	20.14	-1,238.4	-1,055.5	1,380.9	1,331.0	49.85	27.698	
9,931.0	9,841.0	9,998.7	9,806.0	25.2	32.9	20.14	-1,238.4	-1,055.5	1,380.9	1,331.1	49.88	27.688	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	-35.0	-19.7	40.2				
100.0	100.0	100.0	100.0	0.1	0.1	-150.54	-35.0	-19.7	40.2	39.9	0.30	135.349	
200.0	200.0	200.0	200.0	0.3	0.3	-150.54	-35.0	-19.7	40.2	39.5	0.65	62.187	CC
300.0	300.0	299.8	299.8	0.5	0.5	-153.00	-36.0	-18.3	40.4	39.4	1.00	40.441	ES
400.0	400.0	398.3	398.2	0.7	0.7	-157.40	-39.4	-16.4	42.7	41.3	1.35	31.535	
500.0	500.0	496.6	496.3	0.8	0.9	-160.43	-45.6	-16.2	48.6	46.9	1.71	28.397	
600.0	600.0	594.4	593.6	1.0	1.1	-161.97	-54.7	-17.8	57.9	55.8	2.07	27.995	
700.0	700.0	691.7	690.1	1.2	1.4	37.39	-66.6	-21.1	69.2	66.8	2.39	28.960	
800.0	799.8	788.4	785.7	1.4	1.7	39.55	-81.1	-26.1	81.0	78.3	2.74	29.594	
900.0	899.5	884.6	880.0	1.6	2.0	42.79	-98.3	-32.8	93.7	90.6	3.10	30.203	
1,000.0	998.7	980.0	973.0	1.8	2.4	46.61	-117.9	-41.0	107.5	104.0	3.50	30.745	
1,100.0	1,097.5	1,074.6	1,064.5	2.1	2.8	50.67	-140.0	-50.8	122.9	118.9	3.95	31.124	
1,200.0	1,195.9	1,172.8	1,158.9	2.4	3.3	54.74	-164.3	-61.9	139.3	134.8	4.47	31.197	
1,300.0	1,294.3	1,271.0	1,253.4	2.7	3.8	57.97	-188.6	-72.9	156.3	151.3	5.02	31.124	
1,400.0	1,392.7	1,369.2	1,348.0	3.0	4.3	60.56	-213.0	-83.9	173.6	168.0	5.61	30.973	
1,500.0	1,491.2	1,467.4	1,442.5	3.4	4.7	62.68	-237.3	-95.0	191.3	185.1	6.21	30.785	
1,600.0	1,589.6	1,565.6	1,537.0	3.7	5.2	64.44	-261.6	-106.0	209.2	202.3	6.84	30.586	
1,700.0	1,688.0	1,663.8	1,631.5	4.0	5.7	65.93	-285.9	-117.0	227.2	219.7	7.48	30.391	
1,800.0	1,786.5	1,762.0	1,726.0	4.4	6.2	67.19	-310.2	-128.1	245.3	237.2	8.12	30.205	
1,900.0	1,884.9	1,860.2	1,820.5	4.7	6.7	68.29	-334.5	-139.1	263.6	254.8	8.78	30.031	
2,000.0	1,983.3	1,958.4	1,915.0	5.1	7.2	69.24	-358.8	-150.1	281.9	272.5	9.44	29.871	
2,100.0	2,081.7	2,056.6	2,009.5	5.4	7.7	70.07	-383.1	-161.2	300.3	290.2	10.10	29.724	
2,200.0	2,180.2	2,154.8	2,104.0	5.8	8.2	70.81	-407.4	-172.2	318.7	308.0	10.77	29.589	
2,300.0	2,278.6	2,253.0	2,198.5	6.1	8.7	71.47	-431.8	-183.2	337.2	325.8	11.44	29.466	
2,400.0	2,377.0	2,351.2	2,293.0	6.5	9.2	72.06	-456.1	-194.3	355.8	343.6	12.12	29.353	
2,500.0	2,475.4	2,449.4	2,387.5	6.8	9.7	72.59	-480.4	-205.3	374.3	361.5	12.80	29.250	
2,600.0	2,573.9	2,547.6	2,482.0	7.2	10.2	73.07	-504.7	-216.3	392.9	379.4	13.48	29.154	
2,700.0	2,672.3	2,645.8	2,576.5	7.5	10.7	73.50	-529.0	-227.4	411.5	397.4	14.16	29.067	
2,800.0	2,770.7	2,744.0	2,671.0	7.9	11.2	73.90	-553.3	-238.4	430.2	415.3	14.84	28.986	
2,900.0	2,869.1	2,842.2	2,765.6	8.2	11.7	74.27	-577.6	-249.4	448.8	433.3	15.52	28.912	
3,000.0	2,967.6	2,940.4	2,860.1	8.6	12.2	74.61	-601.9	-260.5	467.5	451.3	16.21	28.842	
3,100.0	3,066.0	3,038.7	2,954.6	8.9	12.7	74.92	-626.2	-271.5	486.2	469.3	16.89	28.778	
3,200.0	3,164.4	3,136.9	3,049.1	9.3	13.2	75.21	-650.6	-282.5	504.9	487.3	17.58	28.718	
3,300.0	3,262.8	3,235.1	3,143.6	9.6	13.7	75.47	-674.9	-293.5	523.6	505.3	18.27	28.663	
3,400.0	3,361.3	3,333.3	3,238.1	10.0	14.2	75.72	-699.2	-304.6	542.3	523.4	18.96	28.611	
3,500.0	3,459.7	3,431.5	3,332.6	10.3	14.7	75.95	-723.5	-315.6	561.1	541.4	19.64	28.562	
3,600.0	3,558.1	3,529.7	3,427.1	10.7	15.2	76.17	-747.8	-326.6	579.8	559.5	20.33	28.516	
3,700.0	3,656.6	3,627.9	3,521.6	11.0	15.6	76.38	-772.1	-337.7	598.6	577.5	21.02	28.473	
3,800.0	3,755.0	3,726.1	3,616.1	11.4	16.1	76.57	-796.4	-348.7	617.3	595.6	21.71	28.433	
3,900.0	3,853.4	3,824.3	3,710.6	11.7	16.6	76.75	-820.7	-359.7	636.1	613.7	22.40	28.395	
4,000.0	3,951.8	3,922.5	3,805.1	12.1	17.1	76.92	-845.1	-370.8	654.8	631.7	23.09	28.359	
4,100.0	4,050.3	4,020.7	3,899.6	12.4	17.6	77.08	-869.4	-381.8	673.6	649.8	23.78	28.325	
4,200.0	4,148.7	4,118.9	3,994.1	12.8	18.1	77.23	-893.7	-392.8	692.4	667.9	24.47	28.293	
4,300.0	4,247.1	4,217.1	4,088.6	13.1	18.6	77.37	-918.0	-403.9	711.2	686.0	25.16	28.262	
4,400.0	4,345.5	4,315.3	4,183.2	13.5	19.1	77.51	-942.3	-414.9	730.0	704.1	25.85	28.233	
4,500.0	4,444.0	4,413.5	4,277.7	13.8	19.6	77.64	-966.6	-425.9	748.7	722.2	26.55	28.205	
4,600.0	4,542.4	4,511.7	4,372.2	14.2	20.1	77.76	-990.9	-437.0	767.5	740.3	27.24	28.179	
4,700.0	4,640.8	4,609.9	4,466.7	14.6	20.6	77.88	-1,015.2	-448.0	786.3	758.4	27.93	28.154	
4,800.0	4,739.2	4,708.1	4,561.2	14.9	21.1	77.99	-1,039.5	-459.0	805.1	776.5	28.62	28.131	
4,900.0	4,837.7	4,806.3	4,655.7	15.3	21.6	78.10	-1,063.9	-470.1	823.9	794.6	29.31	28.108	
5,000.0	4,936.1	4,904.6	4,750.2	15.6	22.1	78.20	-1,088.2	-481.1	842.7	812.7	30.01	28.086	
5,100.0	5,034.5	5,002.8	4,844.7	16.0	22.6	78.30	-1,112.5	-492.1	861.5	830.8	30.70	28.065	

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 OM08B 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:	OM08B 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	5,132.9	5,101.0	4,939.2	16.3	23.1	78.39	-1,136.8	-503.2	880.3	849.0	31.39	28.045	
5,300.0	5,231.4	5,199.2	5,033.7	16.7	23.6	78.48	-1,161.1	-514.2	899.2	867.1	32.08	28.026	
5,400.0	5,329.8	5,297.4	5,128.2	17.0	24.1	78.56	-1,185.4	-525.2	918.0	885.2	32.78	28.008	
5,500.0	5,428.2	5,395.6	5,222.7	17.4	24.6	78.65	-1,209.7	-536.3	936.8	903.3	33.47	27.990	
5,600.0	5,526.7	5,493.8	5,317.2	17.7	25.1	78.73	-1,234.0	-547.3	955.6	921.4	34.16	27.974	
5,700.0	5,625.1	5,592.0	5,411.7	18.1	25.6	78.80	-1,258.3	-558.3	974.4	939.6	34.85	27.957	
5,800.0	5,723.5	5,690.2	5,506.2	18.4	26.1	78.87	-1,282.7	-569.4	993.2	957.7	35.55	27.942	
5,900.0	5,821.9	5,788.4	5,600.8	18.8	26.6	78.94	-1,307.0	-580.4	1,012.1	975.8	36.24	27.927	
6,000.0	5,920.4	5,886.6	5,695.3	19.2	27.1	79.01	-1,331.3	-591.4	1,030.9	994.0	36.93	27.912	
6,100.0	6,018.8	5,984.8	5,789.8	19.5	27.6	79.08	-1,355.6	-602.5	1,049.7	1,012.1	37.63	27.898	
6,200.0	6,117.2	6,083.0	5,884.3	19.9	28.1	79.14	-1,379.9	-613.5	1,068.5	1,030.2	38.32	27.885	
6,300.0	6,215.6	6,181.2	5,978.8	20.2	28.6	79.20	-1,404.2	-624.5	1,087.4	1,048.4	39.01	27.872	
6,400.0	6,314.1	6,279.4	6,073.3	20.6	29.1	79.26	-1,428.5	-635.6	1,106.2	1,066.5	39.71	27.859	
6,500.0	6,412.5	6,418.3	6,207.7	20.9	29.7	79.51	-1,460.3	-650.0	1,123.4	1,082.9	40.55	27.705	
6,600.0	6,511.4	6,562.9	6,349.2	21.2	30.3	79.97	-1,487.1	-662.2	1,137.2	1,095.8	41.36	27.498	
6,700.0	6,610.7	6,708.7	6,493.3	21.4	30.7	80.33	-1,507.5	-671.4	1,147.6	1,105.5	42.03	27.306	
6,800.0	6,710.4	6,855.4	6,639.2	21.6	31.0	80.60	-1,521.2	-677.6	1,154.5	1,111.9	42.55	27.134	
6,900.0	6,810.3	7,002.6	6,786.2	21.8	31.2	80.76	-1,528.2	-680.8	1,157.8	1,114.9	42.93	26.971	
7,000.0	6,910.3	7,124.3	6,907.9	21.9	31.3	1.80	-1,529.1	-681.2	1,158.2	1,115.1	43.17	26.833	
7,100.0	7,010.3	7,219.5	7,003.1	22.0	31.3	1.80	-1,529.3	-681.6	1,158.3	1,115.0	43.36	26.712	
7,200.0	7,110.3	7,314.7	7,098.3	22.1	31.4	1.80	-1,529.7	-682.3	1,158.4	1,114.9	43.56	26.591	
7,300.0	7,210.2	7,410.1	7,193.6	22.2	31.5	1.80	-1,530.3	-683.3	1,158.5	1,114.7	43.77	26.469	
7,400.0	7,310.2	7,510.1	7,293.6	22.3	31.6	1.80	-1,531.0	-684.5	1,158.5	1,114.5	43.97	26.345	
7,500.0	7,410.2	7,610.1	7,393.6	22.4	31.7	1.80	-1,531.7	-685.8	1,158.5	1,114.3	44.18	26.221	
7,600.0	7,510.2	7,710.1	7,493.6	22.5	31.8	1.80	-1,532.4	-687.0	1,158.5	1,114.1	44.39	26.097	
7,700.0	7,610.2	7,810.1	7,593.6	22.6	31.9	1.80	-1,533.2	-688.3	1,158.5	1,113.9	44.60	25.973	
7,800.0	7,710.2	7,910.1	7,693.6	22.7	32.0	1.80	-1,533.9	-689.5	1,158.5	1,113.7	44.82	25.849	
7,900.0	7,810.2	8,010.1	7,793.6	22.8	32.0	1.80	-1,534.6	-690.7	1,158.5	1,113.5	45.03	25.725	
8,000.0	7,910.2	8,110.1	7,893.6	22.9	32.1	1.80	-1,535.3	-692.0	1,158.5	1,113.2	45.25	25.602	
8,100.0	8,010.2	8,210.1	7,993.5	23.0	32.2	1.80	-1,536.0	-693.2	1,158.5	1,113.0	45.47	25.479	
8,200.0	8,110.2	8,310.1	8,093.5	23.1	32.3	1.80	-1,536.7	-694.5	1,158.5	1,112.8	45.69	25.356	
8,300.0	8,210.1	8,410.1	8,193.5	23.3	32.4	1.80	-1,537.5	-695.7	1,158.5	1,112.6	45.91	25.233	
8,400.0	8,310.1	8,510.1	8,293.5	23.4	32.5	1.80	-1,538.2	-697.0	1,158.5	1,112.4	46.13	25.111	
8,500.0	8,410.1	8,610.1	8,393.5	23.5	32.6	1.80	-1,538.9	-698.2	1,158.5	1,112.1	46.36	24.989	
8,600.0	8,510.1	8,710.1	8,493.5	23.6	32.7	1.80	-1,539.6	-699.4	1,158.5	1,111.9	46.59	24.868	
8,700.0	8,610.1	8,810.1	8,593.5	23.7	32.8	1.80	-1,540.3	-700.7	1,158.5	1,111.7	46.81	24.747	
8,800.0	8,710.1	8,910.1	8,693.5	23.8	32.9	1.80	-1,541.1	-701.9	1,158.5	1,111.5	47.04	24.626	
8,900.0	8,810.1	9,010.1	8,793.5	23.9	33.0	1.80	-1,541.8	-703.2	1,158.5	1,111.2	47.27	24.506	
9,000.0	8,910.1	9,110.1	8,893.5	24.1	33.1	1.80	-1,542.5	-704.4	1,158.5	1,111.0	47.51	24.386	
9,100.0	9,010.1	9,210.1	8,993.4	24.2	33.2	1.80	-1,543.2	-705.6	1,158.5	1,110.8	47.74	24.266	
9,200.0	9,110.1	9,310.1	9,093.4	24.3	33.3	1.80	-1,543.9	-706.9	1,158.5	1,110.5	47.98	24.147	
9,300.0	9,210.0	9,410.1	9,193.4	24.4	33.4	1.80	-1,544.7	-708.1	1,158.5	1,110.3	48.21	24.029	
9,400.0	9,310.0	9,510.1	9,293.4	24.5	33.5	1.80	-1,545.4	-709.4	1,158.5	1,110.0	48.45	23.911	
9,500.0	9,410.0	9,610.1	9,393.4	24.7	33.6	1.80	-1,546.1	-710.6	1,158.5	1,109.8	48.69	23.793	
9,600.0	9,510.0	9,710.1	9,493.4	24.8	33.7	1.80	-1,546.8	-711.9	1,158.5	1,109.6	48.93	23.676	
9,700.0	9,610.0	9,810.1	9,593.4	24.9	33.8	1.80	-1,547.5	-713.1	1,158.5	1,109.3	49.17	23.560	
9,800.0	9,710.0	9,910.1	9,693.4	25.0	34.0	1.80	-1,548.3	-714.3	1,158.5	1,109.1	49.42	23.444	
9,900.0	9,810.0	10,010.1	9,793.4	25.2	34.1	1.80	-1,549.0	-715.6	1,158.5	1,108.8	49.66	23.328	
9,917.2	9,827.2	10,027.3	9,810.6	25.2	34.1	1.80	-1,549.1	-715.8	1,158.5	1,108.8	49.70	23.309	
9,931.0	9,841.0	10,027.7	9,811.0	25.2	34.1	1.80	-1,549.1	-715.8	1,158.6	1,108.8	49.72	23.302	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	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	400.2	400.2	0.7	0.7	38.64	7.1	5.7	9.1	7.7	1.35	6.744	
492.9	492.9	493.1	492.9	0.8	0.9	70.19	2.6	7.3	7.7	6.1	1.68	4.591	CC
500.0	500.0	500.1	500.0	0.8	0.9	73.77	2.2	7.4	7.8	6.0	1.71	4.533	ES, SF
600.0	600.0	599.6	599.0	1.0	1.1	120.00	-6.0	10.4	12.0	10.0	2.05	5.861	
700.0	700.0	698.5	697.3	1.2	1.3	-22.38	-17.3	14.4	21.1	18.7	2.41	8.753	
800.0	799.8	797.2	794.7	1.4	1.6	-15.38	-31.8	19.6	31.0	28.2	2.75	11.254	
900.0	899.5	895.4	891.1	1.6	2.0	-11.87	-49.3	25.9	41.1	38.0	3.10	13.259	
1,000.0	998.7	993.9	987.2	1.8	2.4	-9.82	-69.8	33.3	51.0	47.6	3.44	14.815	
1,100.0	1,097.5	1,093.6	1,084.3	2.1	2.8	-8.84	-91.2	41.0	58.3	54.5	3.79	15.372	
1,200.0	1,195.9	1,193.5	1,181.5	2.4	3.2	-8.36	-112.7	48.7	63.6	59.4	4.15	15.320	
1,300.0	1,294.3	1,293.4	1,278.7	2.7	3.6	-7.95	-134.1	56.4	68.8	64.3	4.51	15.273	
1,400.0	1,392.7	1,393.2	1,376.0	3.0	4.0	-7.60	-155.6	64.1	74.1	69.2	4.86	15.235	
1,500.0	1,491.2	1,493.1	1,473.2	3.4	4.5	-7.29	-177.0	71.8	79.3	74.1	5.22	15.204	
1,600.0	1,589.6	1,592.9	1,570.4	3.7	4.9	-7.03	-198.5	79.5	84.6	79.0	5.57	15.179	
1,700.0	1,688.0	1,692.8	1,667.6	4.0	5.3	-6.79	-220.0	87.3	89.9	83.9	5.93	15.158	
1,800.0	1,786.5	1,792.7	1,764.8	4.4	5.8	-6.58	-241.4	95.0	95.1	88.8	6.28	15.141	
1,900.0	1,884.9	1,892.5	1,862.1	4.7	6.2	-6.40	-262.9	102.7	100.4	93.7	6.64	15.126	
2,000.0	1,983.3	1,992.4	1,959.3	5.1	6.6	-6.23	-284.3	110.4	105.6	98.7	6.99	15.114	
2,100.0	2,081.7	2,092.3	2,056.5	5.4	7.0	-6.07	-305.8	118.1	110.9	103.6	7.34	15.103	
2,200.0	2,180.2	2,192.1	2,153.7	5.8	7.5	-5.94	-327.2	125.8	116.2	108.5	7.70	15.094	
2,300.0	2,278.6	2,292.0	2,251.0	6.1	7.9	-5.81	-348.7	133.5	121.5	113.4	8.05	15.085	
2,400.0	2,377.0	2,391.8	2,348.2	6.5	8.3	-5.69	-370.2	141.2	126.7	118.3	8.40	15.078	
2,500.0	2,475.4	2,491.7	2,445.4	6.8	8.8	-5.59	-391.6	148.9	132.0	123.2	8.76	15.072	
2,600.0	2,573.9	2,591.6	2,542.6	7.2	9.2	-5.49	-413.1	156.7	137.3	128.2	9.11	15.067	
2,700.0	2,672.3	2,691.4	2,639.9	7.5	9.6	-5.40	-434.5	164.4	142.5	133.1	9.46	15.062	
2,800.0	2,770.7	2,791.3	2,737.1	7.9	10.1	-5.31	-456.0	172.1	147.8	138.0	9.82	15.057	
2,900.0	2,869.1	2,891.1	2,834.3	8.2	10.5	-5.23	-477.5	179.8	153.1	142.9	10.17	15.053	
3,000.0	2,967.6	2,991.0	2,931.5	8.6	10.9	-5.16	-498.9	187.5	158.3	147.8	10.52	15.050	
3,100.0	3,066.0	3,090.9	3,028.7	8.9	11.4	-5.09	-520.4	195.2	163.6	152.7	10.87	15.046	
3,200.0	3,164.4	3,190.7	3,126.0	9.3	11.8	-5.02	-541.8	202.9	168.9	157.7	11.23	15.044	
3,300.0	3,262.8	3,290.6	3,223.2	9.6	12.2	-4.96	-563.3	210.6	174.2	162.6	11.58	15.041	
3,400.0	3,361.3	3,390.4	3,320.4	10.0	12.7	-4.91	-584.7	218.3	179.4	167.5	11.93	15.038	
3,500.0	3,459.7	3,490.3	3,417.6	10.3	13.1	-4.85	-606.2	226.0	184.7	172.4	12.28	15.036	
3,600.0	3,558.1	3,590.2	3,514.9	10.7	13.6	-4.80	-627.7	233.8	190.0	177.3	12.64	15.034	
3,700.0	3,656.6	3,690.0	3,612.1	11.0	14.0	-4.75	-649.1	241.5	195.3	182.3	12.99	15.032	
3,800.0	3,755.0	3,789.9	3,709.3	11.4	14.4	-4.71	-670.6	249.2	200.5	187.2	13.34	15.030	
3,900.0	3,853.4	3,889.7	3,806.5	11.7	14.9	-4.66	-692.0	256.9	205.8	192.1	13.69	15.029	
4,000.0	3,951.8	3,989.6	3,903.7	12.1	15.3	-4.62	-713.5	264.6	211.1	197.0	14.05	15.027	
4,100.0	4,050.3	4,089.5	4,001.0	12.4	15.7	-4.58	-735.0	272.3	216.3	201.9	14.40	15.026	
4,200.0	4,148.7	4,189.3	4,098.2	12.8	16.2	-4.55	-756.4	280.0	221.6	206.9	14.75	15.024	
4,300.0	4,247.1	4,289.2	4,195.4	13.1	16.6	-4.51	-777.9	287.7	226.9	211.8	15.10	15.023	
4,400.0	4,345.5	4,389.0	4,292.6	13.5	17.0	-4.48	-799.3	295.4	232.2	216.7	15.46	15.022	
4,500.0	4,444.0	4,488.9	4,389.9	13.8	17.5	-4.45	-820.8	303.2	237.4	221.6	15.81	15.021	
4,600.0	4,542.4	4,588.8	4,487.1	14.2	17.9	-4.41	-842.2	310.9	242.7	226.6	16.16	15.020	
4,700.0	4,640.8	4,688.6	4,584.3	14.6	18.3	-4.38	-863.7	318.6	248.0	231.5	16.51	15.019	
4,800.0	4,739.2	4,788.5	4,681.5	14.9	18.8	-4.36	-885.2	326.3	253.3	236.4	16.86	15.018	
4,900.0	4,837.7	4,888.4	4,778.8	15.3	19.2	-4.33	-906.6	334.0	258.5	241.3	17.22	15.017	
5,000.0	4,936.1	4,988.2	4,876.0	15.6	19.6	-4.30	-928.1	341.7	263.8	246.2	17.57	15.016	

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 OM08B 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:	OM08B 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	5,034.5	5,088.1	4,973.2	16.0	20.1	-4.28	-949.5	349.4	269.1	251.2	17.92	15.015	
5,200.0	5,132.9	5,187.9	5,070.4	16.3	20.5	-4.25	-971.0	357.1	274.4	256.1	18.27	15.015	
5,300.0	5,231.4	5,287.8	5,167.6	16.7	20.9	-4.23	-992.5	364.8	279.6	261.0	18.63	15.014	
5,400.0	5,329.8	5,387.7	5,264.9	17.0	21.4	-4.21	-1,013.9	372.5	284.9	265.9	18.98	15.013	
5,500.0	5,428.2	5,487.5	5,362.1	17.4	21.8	-4.19	-1,035.4	380.3	290.2	270.9	19.33	15.013	
5,600.0	5,526.7	5,587.4	5,459.3	17.7	22.2	-4.17	-1,056.8	388.0	295.5	275.8	19.68	15.012	
5,700.0	5,625.1	5,687.2	5,556.5	18.1	22.7	-4.14	-1,078.3	395.7	300.7	280.7	20.03	15.011	
5,800.0	5,723.5	5,787.1	5,653.8	18.4	23.1	-4.13	-1,099.7	403.4	306.0	285.6	20.39	15.011	
5,900.0	5,821.9	5,887.0	5,751.0	18.8	23.6	-4.11	-1,121.2	411.1	311.3	290.5	20.74	15.010	
6,000.0	5,920.4	5,986.8	5,848.2	19.2	24.0	-4.09	-1,142.7	418.8	316.6	295.5	21.09	15.010	
6,100.0	6,018.8	6,086.7	5,945.4	19.5	24.4	-4.07	-1,164.1	426.5	321.8	300.4	21.44	15.009	
6,200.0	6,117.2	6,186.5	6,042.7	19.9	24.9	-4.05	-1,185.6	434.2	327.1	305.3	21.79	15.009	
6,300.0	6,215.6	6,286.4	6,139.9	20.2	25.3	-4.04	-1,207.0	441.9	332.4	310.2	22.15	15.009	
6,400.0	6,314.1	6,387.0	6,237.8	20.6	25.7	-4.02	-1,228.6	449.7	337.6	315.1	22.50	15.007	
6,500.0	6,412.5	6,500.3	6,348.7	20.9	26.2	-4.03	-1,250.7	457.6	340.9	318.0	22.87	14.902	
6,600.0	6,511.4	6,613.8	6,460.6	21.2	26.5	-4.04	-1,268.7	464.1	342.7	319.5	23.23	14.751	
6,700.0	6,610.7	6,727.4	6,573.2	21.4	26.8	-4.06	-1,282.4	469.0	344.1	320.5	23.57	14.597	
6,800.0	6,710.4	6,841.1	6,686.4	21.6	27.0	-4.07	-1,292.0	472.5	345.0	321.1	23.89	14.440	
6,900.0	6,810.3	6,954.7	6,799.9	21.8	27.2	-4.07	-1,297.3	474.4	345.5	321.3	24.19	14.279	
7,000.0	6,910.3	7,065.1	6,910.2	21.9	27.3	-83.09	-1,298.6	474.8	345.5	321.0	24.49	14.108	
7,100.0	7,010.3	7,164.9	7,010.0	22.0	27.3	-83.09	-1,298.7	474.5	345.5	320.6	24.84	13.908	
7,200.0	7,110.3	7,264.7	7,109.9	22.1	27.4	-83.09	-1,299.1	473.9	345.5	320.3	25.19	13.713	
7,300.0	7,210.2	7,364.5	7,209.7	22.2	27.5	-83.08	-1,299.7	472.8	345.5	319.9	25.55	13.522	
7,400.0	7,310.2	7,464.5	7,309.6	22.3	27.6	-83.08	-1,300.4	471.6	345.5	319.6	25.90	13.337	
7,500.0	7,410.2	7,564.5	7,409.6	22.4	27.7	-83.08	-1,301.1	470.4	345.5	319.2	26.26	13.157	
7,600.0	7,510.2	7,664.5	7,509.6	22.5	27.8	-83.08	-1,301.9	469.1	345.5	318.8	26.61	12.981	
7,700.0	7,610.2	7,764.5	7,609.6	22.6	27.8	-83.08	-1,302.6	467.9	345.5	318.5	26.97	12.811	
7,800.0	7,710.2	7,864.5	7,709.6	22.7	27.9	-83.08	-1,303.3	466.6	345.5	318.1	27.32	12.645	
7,900.0	7,810.2	7,964.5	7,809.6	22.8	28.0	-83.08	-1,304.0	465.4	345.5	317.8	27.67	12.483	
8,000.0	7,910.2	8,064.5	7,909.6	22.9	28.1	-83.08	-1,304.7	464.1	345.4	317.4	28.03	12.325	
8,100.0	8,010.2	8,164.5	8,009.6	23.0	28.2	-83.08	-1,305.4	462.9	345.4	317.1	28.38	12.171	
8,200.0	8,110.2	8,264.5	8,109.6	23.1	28.3	-83.08	-1,306.2	461.6	345.4	316.7	28.74	12.021	
8,300.0	8,210.1	8,364.5	8,209.6	23.3	28.4	-83.08	-1,306.9	460.4	345.4	316.4	29.09	11.875	
8,400.0	8,310.1	8,464.5	8,309.5	23.4	28.5	-83.08	-1,307.6	459.2	345.4	316.0	29.44	11.732	
8,500.0	8,410.1	8,564.5	8,409.5	23.5	28.6	-83.08	-1,308.3	457.9	345.4	315.6	29.80	11.592	
8,600.0	8,510.1	8,664.5	8,509.5	23.6	28.7	-83.08	-1,309.0	456.7	345.4	315.3	30.15	11.456	
8,700.0	8,610.1	8,764.5	8,609.5	23.7	28.8	-83.08	-1,309.7	455.4	345.4	314.9	30.51	11.323	
8,800.0	8,710.1	8,864.5	8,709.5	23.8	28.9	-83.08	-1,310.5	454.2	345.4	314.6	30.86	11.193	
8,900.0	8,810.1	8,964.5	8,809.5	23.9	29.0	-83.08	-1,311.2	452.9	345.4	314.2	31.21	11.066	
9,000.0	8,910.1	9,064.5	8,909.5	24.1	29.1	-83.08	-1,311.9	451.7	345.4	313.9	31.57	10.942	
9,100.0	9,010.1	9,164.5	9,009.5	24.2	29.2	-83.08	-1,312.6	450.4	345.4	313.5	31.92	10.821	
9,200.0	9,110.1	9,264.5	9,109.5	24.3	29.3	-83.08	-1,313.3	449.2	345.4	313.1	32.28	10.702	
9,300.0	9,210.0	9,364.5	9,209.5	24.4	29.4	-83.08	-1,314.0	447.9	345.4	312.8	32.63	10.586	
9,400.0	9,310.0	9,464.5	9,309.4	24.5	29.5	-83.08	-1,314.8	446.7	345.4	312.4	32.98	10.472	
9,500.0	9,410.0	9,564.5	9,409.4	24.7	29.6	-83.08	-1,315.5	445.5	345.4	312.1	33.34	10.361	
9,600.0	9,510.0	9,664.5	9,509.4	24.8	29.7	-83.08	-1,316.2	444.2	345.4	311.7	33.69	10.252	
9,700.0	9,610.0	9,764.5	9,609.4	24.9	29.8	-83.08	-1,316.9	443.0	345.4	311.4	34.04	10.146	
9,800.0	9,710.0	9,864.5	9,709.4	25.0	29.9	-83.08	-1,317.6	441.7	345.4	311.0	34.40	10.042	
9,900.0	9,810.0	9,964.5	9,809.4	25.2	30.0	-83.08	-1,318.4	440.5	345.4	310.7	34.75	9.939	
9,924.0	9,834.0	9,988.5	9,833.4	25.2	30.0	-83.08	-1,318.5	440.2	345.4	310.6	34.84	9.915	
9,931.0	9,841.0	9,991.1	9,836.0	25.2	30.0	-83.08	-1,318.5	440.1	345.4	310.6	34.85	9.911	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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	30.04	25.9	15.0	29.9				
100.0	100.0	100.0	100.0	0.1	0.1	30.04	25.9	15.0	29.9	29.6	0.30	100.669	
200.0	200.0	200.0	200.0	0.3	0.3	30.04	25.9	15.0	29.9	29.2	0.65	46.253	
300.0	300.0	300.6	300.6	0.5	0.5	32.85	24.2	15.6	28.9	27.9	1.00	28.870	
400.0	400.0	400.9	400.8	0.7	0.7	42.45	19.4	17.7	26.3	24.9	1.37	19.182	
500.0	500.0	500.8	500.2	0.8	0.9	61.78	11.4	21.2	24.0	22.3	1.77	13.608	
519.4	519.4	520.0	519.4	0.9	1.0	66.76	9.4	22.0	23.9	22.1	1.85	12.969	CC, ES
600.0	600.0	600.0	598.7	1.0	1.2	89.47	0.2	26.0	26.0	23.8	2.14	12.153	SF
700.0	700.0	698.3	695.8	1.2	1.5	-49.52	-13.9	32.0	34.0	31.4	2.55	13.314	
800.0	799.8	796.3	792.0	1.4	1.9	-37.26	-31.0	39.4	45.0	42.1	2.90	15.520	
900.0	899.5	893.8	887.1	1.6	2.3	-30.24	-51.0	47.9	57.4	54.1	3.26	17.624	
1,000.0	998.7	990.9	980.9	1.8	2.7	-25.94	-73.8	57.8	70.3	66.7	3.62	19.432	
1,100.0	1,097.5	1,088.8	1,074.8	2.1	3.2	-23.21	-99.5	68.8	83.0	79.1	3.98	20.840	
1,200.0	1,195.9	1,188.1	1,169.8	2.4	3.7	-21.63	-125.9	80.1	94.5	90.1	4.37	21.631	
1,300.0	1,294.3	1,287.5	1,264.9	2.7	4.3	-20.40	-152.3	91.4	106.0	101.2	4.75	22.313	
1,400.0	1,392.7	1,386.8	1,360.0	3.0	4.8	-19.41	-178.7	102.8	117.5	112.3	5.13	22.913	
1,500.0	1,491.2	1,486.1	1,455.0	3.4	5.3	-18.59	-205.1	114.1	129.0	123.5	5.50	23.445	
1,600.0	1,589.6	1,585.4	1,550.1	3.7	5.8	-17.91	-231.5	125.5	140.6	134.7	5.88	23.918	
1,700.0	1,688.0	1,684.7	1,645.2	4.0	6.4	-17.34	-257.9	136.8	152.2	145.9	6.25	24.342	
1,800.0	1,786.5	1,784.0	1,740.2	4.4	6.9	-16.84	-284.3	148.1	163.8	157.1	6.62	24.724	
1,900.0	1,884.9	1,883.4	1,835.3	4.7	7.4	-16.41	-310.7	159.5	175.4	168.4	7.00	25.069	
2,000.0	1,983.3	1,982.7	1,930.4	5.1	8.0	-16.04	-337.1	170.8	187.0	179.6	7.37	25.383	
2,100.0	2,081.7	2,082.0	2,025.4	5.4	8.5	-15.71	-363.5	182.1	198.6	190.9	7.74	25.670	
2,200.0	2,180.2	2,181.3	2,120.5	5.8	9.0	-15.41	-389.9	193.5	210.2	202.1	8.11	25.933	
2,300.0	2,278.6	2,280.6	2,215.6	6.1	9.5	-15.15	-416.3	204.8	221.9	213.4	8.48	26.174	
2,400.0	2,377.0	2,379.9	2,310.6	6.5	10.1	-14.91	-442.7	216.2	233.5	224.7	8.85	26.397	
2,500.0	2,475.4	2,479.3	2,405.7	6.8	10.6	-14.69	-469.1	227.5	245.2	235.9	9.22	26.603	
2,600.0	2,573.9	2,578.6	2,500.8	7.2	11.1	-14.50	-495.5	238.8	256.8	247.2	9.58	26.794	
2,700.0	2,672.3	2,677.9	2,595.9	7.5	11.7	-14.32	-521.9	250.2	268.5	258.5	9.95	26.972	
2,800.0	2,770.7	2,777.2	2,690.9	7.9	12.2	-14.16	-548.3	261.5	280.1	269.8	10.32	27.138	
2,900.0	2,869.1	2,876.5	2,786.0	8.2	12.7	-14.01	-574.7	272.8	291.8	281.1	10.69	27.293	
3,000.0	2,967.6	2,975.8	2,881.1	8.6	13.3	-13.87	-601.1	284.2	303.4	292.4	11.06	27.438	
3,100.0	3,066.0	3,075.1	2,976.1	8.9	13.8	-13.74	-627.5	295.5	315.1	303.6	11.43	27.575	
3,200.0	3,164.4	3,174.5	3,071.2	9.3	14.3	-13.62	-653.9	306.9	326.7	314.9	11.79	27.703	
3,300.0	3,262.8	3,273.8	3,166.3	9.6	14.9	-13.51	-680.3	318.2	338.4	326.2	12.16	27.824	
3,400.0	3,361.3	3,373.1	3,261.3	10.0	15.4	-13.40	-706.7	329.5	350.0	337.5	12.53	27.937	
3,500.0	3,459.7	3,472.4	3,356.4	10.3	15.9	-13.30	-733.1	340.9	361.7	348.8	12.90	28.045	
3,600.0	3,558.1	3,571.7	3,451.5	10.7	16.5	-13.21	-759.5	352.2	373.4	360.1	13.26	28.147	
3,700.0	3,656.6	3,671.0	3,546.5	11.0	17.0	-13.13	-785.9	363.5	385.0	371.4	13.63	28.244	
3,800.0	3,755.0	3,770.4	3,641.6	11.4	17.5	-13.05	-812.3	374.9	396.7	382.7	14.00	28.335	
3,900.0	3,853.4	3,869.7	3,736.7	11.7	18.1	-12.97	-838.7	386.2	408.4	394.0	14.37	28.423	
4,000.0	3,951.8	3,969.0	3,831.7	12.1	18.6	-12.90	-865.1	397.6	420.0	405.3	14.73	28.506	
4,100.0	4,050.3	4,068.3	3,926.8	12.4	19.1	-12.83	-891.5	408.9	431.7	416.6	15.10	28.585	
4,200.0	4,148.7	4,167.6	4,021.9	12.8	19.7	-12.77	-917.9	420.2	443.4	427.9	15.47	28.660	
4,300.0	4,247.1	4,266.9	4,117.0	13.1	20.2	-12.71	-944.3	431.6	455.0	439.2	15.84	28.732	
4,400.0	4,345.5	4,366.3	4,212.0	13.5	20.7	-12.65	-970.7	442.9	466.7	450.5	16.20	28.801	
4,500.0	4,444.0	4,465.6	4,307.1	13.8	21.3	-12.59	-997.1	454.2	478.4	461.8	16.57	28.867	
4,600.0	4,542.4	4,564.9	4,402.2	14.2	21.8	-12.54	-1,023.5	465.6	490.0	473.1	16.94	28.930	
4,700.0	4,640.8	4,664.2	4,497.2	14.6	22.3	-12.49	-1,049.9	476.9	501.7	484.4	17.31	28.990	
4,800.0	4,739.2	4,763.5	4,592.3	14.9	22.9	-12.44	-1,076.3	488.3	513.4	495.7	17.67	29.048	
4,900.0	4,837.7	4,862.8	4,687.4	15.3	23.4	-12.40	-1,102.7	499.6	525.0	507.0	18.04	29.104	
5,000.0	4,936.1	4,962.2	4,782.4	15.6	23.9	-12.35	-1,129.1	510.9	536.7	518.3	18.41	29.158	

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 OM08B 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:	OM08B 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	5,034.5	5,061.5	4,877.5	16.0	24.5	-12.31	-1,155.5	522.3	548.4	529.6	18.77	29.209	
5,200.0	5,132.9	5,160.8	4,972.6	16.3	25.0	-12.27	-1,181.9	533.6	560.0	540.9	19.14	29.259	
5,300.0	5,231.4	5,260.1	5,067.6	16.7	25.5	-12.23	-1,208.4	544.9	571.7	552.2	19.51	29.306	
5,400.0	5,329.8	5,359.4	5,162.7	17.0	26.1	-12.19	-1,234.8	556.3	583.4	563.5	19.88	29.352	
5,500.0	5,428.2	5,458.7	5,257.8	17.4	26.6	-12.16	-1,261.2	567.6	595.1	574.8	20.24	29.397	
5,600.0	5,526.7	5,558.0	5,352.8	17.7	27.1	-12.12	-1,287.6	579.0	606.7	586.1	20.61	29.440	
5,700.0	5,625.1	5,657.4	5,447.9	18.1	27.7	-12.09	-1,314.0	590.3	618.4	597.4	20.98	29.481	
5,800.0	5,723.5	5,756.7	5,543.0	18.4	28.2	-12.06	-1,340.4	601.6	630.1	608.7	21.34	29.521	
5,900.0	5,821.9	5,856.0	5,638.1	18.8	28.7	-12.03	-1,366.8	613.0	641.7	620.0	21.71	29.560	
6,000.0	5,920.4	5,955.3	5,733.1	19.2	29.3	-12.00	-1,393.2	624.3	653.4	631.3	22.08	29.597	
6,100.0	6,018.8	6,054.6	5,828.2	19.5	29.8	-11.97	-1,419.6	635.6	665.1	642.6	22.44	29.633	
6,200.0	6,117.2	6,153.9	5,923.3	19.9	30.3	-11.94	-1,446.0	647.0	676.8	653.9	22.81	29.668	
6,300.0	6,215.6	6,253.3	6,018.3	20.2	30.9	-11.92	-1,472.4	658.3	688.4	665.2	23.18	29.702	
6,400.0	6,314.1	6,373.0	6,133.3	20.6	31.5	-11.90	-1,503.1	671.5	699.2	675.6	23.58	29.647	
6,500.0	6,412.5	6,504.8	6,261.3	20.9	32.0	-11.95	-1,532.0	683.9	705.8	681.8	24.02	29.389	
6,600.0	6,511.4	6,637.1	6,391.0	21.2	32.5	-12.02	-1,555.6	694.0	710.4	686.0	24.42	29.093	
6,700.0	6,610.7	6,769.7	6,522.1	21.4	32.9	-12.07	-1,573.6	701.8	713.8	689.1	24.79	28.792	
6,800.0	6,710.4	6,902.5	6,654.2	21.6	33.1	-12.11	-1,586.1	707.2	716.1	691.0	25.14	28.486	
6,900.0	6,810.3	7,035.4	6,787.0	21.8	33.3	-12.13	-1,592.9	710.1	717.2	691.7	25.46	28.173	
7,000.0	6,910.3	7,158.7	6,910.3	21.9	33.4	-91.16	-1,594.4	710.7	717.2	691.5	25.75	27.851	
7,100.0	7,010.3	7,258.8	7,010.3	22.0	33.4	-91.16	-1,594.5	710.4	717.2	691.1	26.09	27.489	
7,200.0	7,110.3	7,358.9	7,110.4	22.1	33.5	-91.15	-1,594.9	709.7	717.2	690.8	26.44	27.131	
7,300.0	7,210.2	7,459.0	7,210.5	22.2	33.6	-91.15	-1,595.5	708.7	717.2	690.5	26.78	26.778	
7,400.0	7,310.2	7,559.0	7,310.5	22.3	33.7	-91.15	-1,596.2	707.4	717.2	690.1	27.14	26.432	
7,500.0	7,410.2	7,659.0	7,410.5	22.4	33.7	-91.15	-1,597.0	706.2	717.2	689.7	27.49	26.095	
7,600.0	7,510.2	7,759.0	7,510.4	22.5	33.8	-91.15	-1,597.7	704.9	717.2	689.4	27.84	25.766	
7,700.0	7,610.2	7,859.0	7,610.4	22.6	33.9	-91.15	-1,598.4	703.7	717.2	689.0	28.19	25.446	
7,800.0	7,710.2	7,959.0	7,710.4	22.7	33.9	-91.15	-1,599.1	702.4	717.2	688.7	28.54	25.133	
7,900.0	7,810.2	8,059.0	7,810.4	22.8	34.0	-91.15	-1,599.8	701.2	717.2	688.3	28.89	24.828	
8,000.0	7,910.2	8,159.0	7,910.4	22.9	34.1	-91.15	-1,600.5	699.9	717.2	688.0	29.24	24.530	
8,100.0	8,010.2	8,259.0	8,010.4	23.0	34.2	-91.15	-1,601.3	698.7	717.2	687.6	29.59	24.239	
8,200.0	8,110.2	8,359.0	8,110.4	23.1	34.2	-91.15	-1,602.0	697.4	717.2	687.3	29.94	23.955	
8,300.0	8,210.1	8,459.0	8,210.4	23.3	34.3	-91.15	-1,602.7	696.2	717.2	686.9	30.29	23.677	
8,400.0	8,310.1	8,559.0	8,310.4	23.4	34.4	-91.15	-1,603.4	695.0	717.2	686.6	30.64	23.406	
8,500.0	8,410.1	8,659.0	8,410.4	23.5	34.5	-91.15	-1,604.1	693.7	717.2	686.2	30.99	23.141	
8,600.0	8,510.1	8,759.0	8,510.3	23.6	34.6	-91.15	-1,604.8	692.5	717.2	685.9	31.34	22.882	
8,700.0	8,610.1	8,859.0	8,610.3	23.7	34.6	-91.15	-1,605.6	691.2	717.2	685.5	31.69	22.628	
8,800.0	8,710.1	8,959.0	8,710.3	23.8	34.7	-91.15	-1,606.3	690.0	717.2	685.1	32.05	22.381	
8,900.0	8,810.1	9,059.0	8,810.3	23.9	34.8	-91.15	-1,607.0	688.7	717.2	684.8	32.40	22.138	
9,000.0	8,910.1	9,159.0	8,910.3	24.1	34.9	-91.15	-1,607.7	687.5	717.2	684.4	32.75	21.901	
9,100.0	9,010.1	9,259.0	9,010.3	24.2	35.0	-91.15	-1,608.4	686.2	717.2	684.1	33.10	21.668	
9,200.0	9,110.1	9,359.0	9,110.3	24.3	35.0	-91.15	-1,609.1	685.0	717.2	683.7	33.45	21.441	
9,300.0	9,210.0	9,459.0	9,210.3	24.4	35.1	-91.15	-1,609.9	683.8	717.2	683.4	33.80	21.218	
9,400.0	9,310.0	9,559.0	9,310.3	24.5	35.2	-91.15	-1,610.6	682.5	717.2	683.0	34.15	20.999	
9,500.0	9,410.0	9,659.0	9,410.3	24.7	35.3	-91.15	-1,611.3	681.3	717.2	682.7	34.50	20.786	
9,600.0	9,510.0	9,759.0	9,510.2	24.8	35.4	-91.15	-1,612.0	680.0	717.2	682.3	34.85	20.576	
9,700.0	9,610.0	9,859.0	9,610.2	24.9	35.5	-91.15	-1,612.7	678.8	717.2	682.0	35.21	20.371	
9,800.0	9,710.0	9,959.0	9,710.2	25.0	35.6	-91.15	-1,613.4	677.5	717.2	681.6	35.56	20.169	
9,900.0	9,810.0	10,059.0	9,810.2	25.2	35.7	-91.15	-1,614.2	676.3	717.2	681.3	35.91	19.972	
9,920.7	9,830.6	10,079.6	9,830.9	25.2	35.7	-91.15	-1,614.3	676.0	717.2	681.2	35.98	19.932	
9,931.0	9,841.0	10,079.7	9,831.0	25.2	35.7	-91.15	-1,614.3	676.0	717.2	681.2	36.00	19.923	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM08B 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:	OM08B 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)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: OM08B B21 696
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.65°