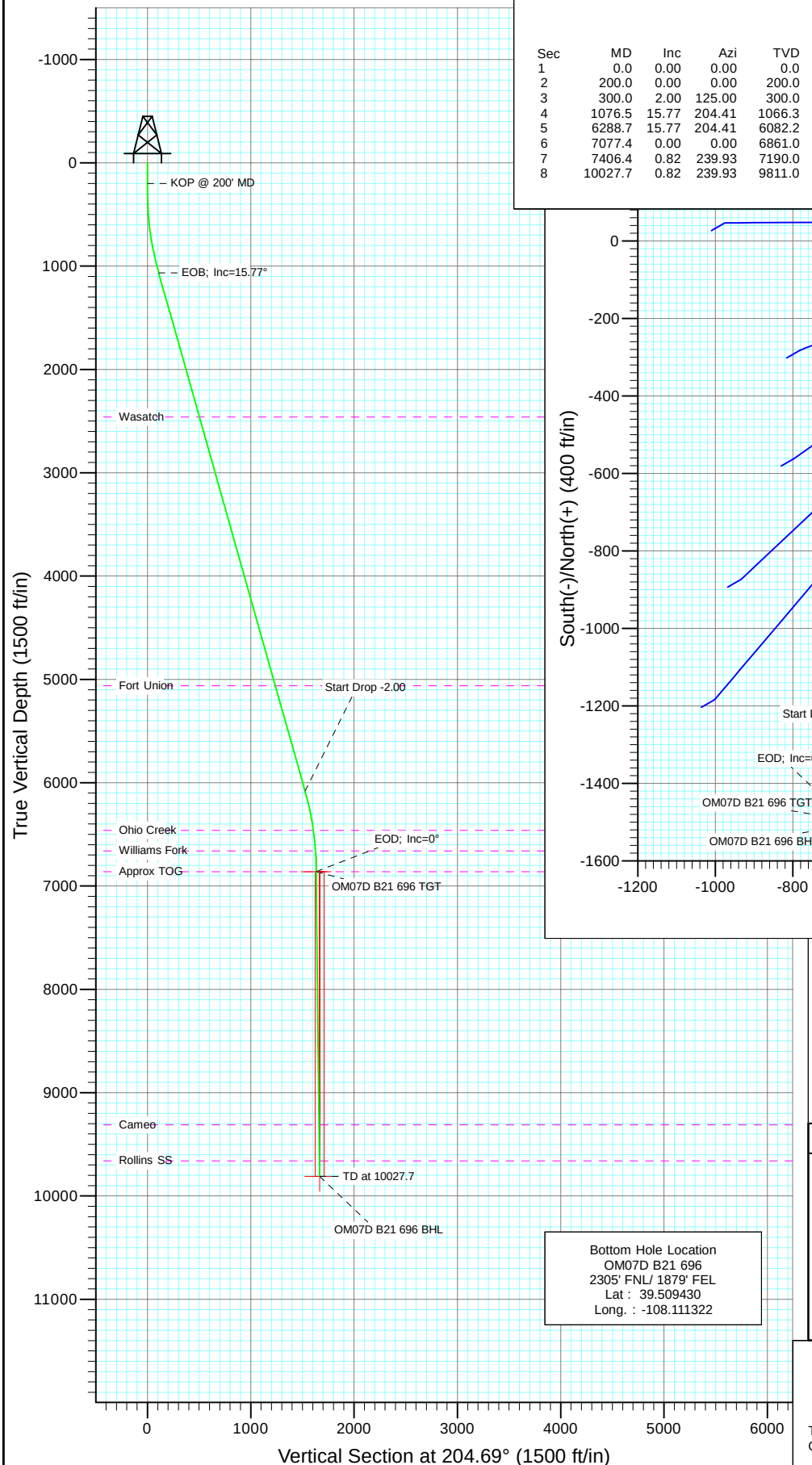
Berry Petroleum Company

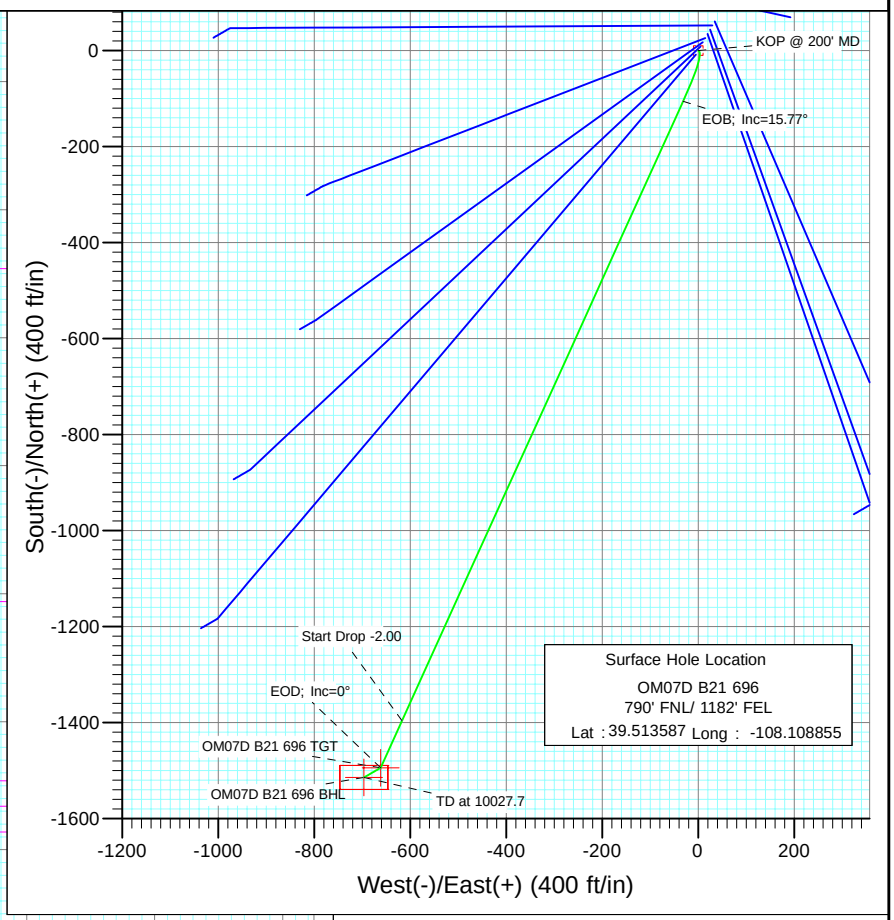
Project: Garfield County
Site: NENE S21-T6S-R96W (B21 696 Pad)
Well: OM07D B21 696
Wellbore: DD
Design: Plan #1

CATHEDRAL

SECTION DETAILS

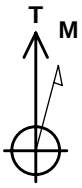
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	300.0	2.00	125.00	300.0	-1.0	1.4	2.00	125.00	0.3	
4	1076.5	15.77	204.41	1066.3	-105.5	-31.3	2.00	86.50	108.9	
5	6288.7	15.77	204.41	6082.2	-1395.8	-616.9	0.00	0.00	1525.9	
6	7077.4	0.00	0.00	6861.0	-1494.1	-661.5	2.00	180.00	1633.8	OM07D B21 696 TGT
7	7406.4	0.82	239.93	7190.0	-1495.3	-663.5	0.25	239.93	1635.7	
8	10027.7	0.82	239.93	9811.0	-1514.1	-696.1	0.00	0.00	1666.5	OM07D B21 696 BHL





Surface Hole Location
OM07D B21 696
790' FNL/ 1182' FEL
Lat : 39.513587 Long : -108.108855

Bottom Hole Location
OM07D B21 696
2305' FNL/ 1879' FEL
Lat : 39.509430
Long. : -108.111322



Azimuths to True North
Magnetic North: 10.45°

Magnetic Field
Strength: 52312.3snT
Dip Angle: 65.76°
Date: 11/30/2010
Model: IGRF200510

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2461.0	2525.8	Wasatch
5061.0	5227.5	Fort Union
6461.0	6676.1	Ohio Creek
6661.0	6877.3	Williams Fork
6861.0	7077.4	Approx TOG
9311.0	9527.6	Cameo
9661.0	9877.7	Rollins SS

DESIGN DETAILS: Plan #1

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

Target	Azimuth	Origin	N/S	E/W	From TVD
OM07D B21 696 BHL	204.69	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 OM07D 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:	OM07D 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	OM07D B21 696					
Well Position	**+N/-S**	0.0 ft	**Northing:**	1,622,523.72 ft	**Latitude:**	39.513587
	+E/-W	0.0 ft	**Easting:**	2,264,069.54 ft	**Longitude:**	-108.108855
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	204.69	

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	2.00	125.00	300.0	-1.0	1.4	2.00	2.00	0.00	125.00	
1,076.5	15.77	204.41	1,066.3	-105.5	-31.3	2.00	1.77	10.23	86.50	
6,288.7	15.77	204.41	6,082.2	-1,395.8	-616.9	0.00	0.00	0.00	0.00	
7,077.4	0.00	0.00	6,861.0	-1,494.1	-661.5	2.00	-2.00	0.00	180.00	OM07D B21 696 TGT
7,406.4	0.82	239.93	7,190.0	-1,495.3	-663.5	0.25	0.25	-36.50	239.93	
10,027.7	0.82	239.93	9,811.0	-1,514.1	-696.1	0.00	0.00	0.00	0.00	OM07D B21 696 BHL

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM07D B21 696
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Project:	Garfield County	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site:	NENE S21-T6S-R96W (B21 696 Pad)	**North Reference:**	True
Well:	OM07D 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	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200' MD
210.0	0.20	125.00	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	125.00	240.0	-0.2	0.2	0.0	2.00	2.00	
270.0	1.40	125.00	270.0	-0.5	0.7	0.2	2.00	2.00	
300.0	2.00	125.00	300.0	-1.0	1.4	0.3	2.00	2.00	
330.0	2.12	141.39	330.0	-1.7	2.2	0.7	2.00	0.41	
360.0	2.39	155.02	359.9	-2.7	2.8	1.3	2.00	0.90	
390.0	2.77	165.43	389.9	-4.0	3.3	2.3	2.00	1.26	
420.0	3.22	173.16	419.9	-5.5	3.5	3.6	2.00	1.48	
450.0	3.71	178.93	449.8	-7.3	3.7	5.1	2.00	1.63	
480.0	4.22	183.33	479.7	-9.4	3.6	7.0	2.00	1.73	
510.0	4.76	186.75	509.6	-11.8	3.4	9.3	2.00	1.79	
540.0	5.31	189.47	539.5	-14.4	3.0	11.8	2.00	1.84	
570.0	5.87	191.68	569.4	-17.2	2.5	14.6	2.00	1.87	
600.0	6.44	193.50	599.2	-20.4	1.8	17.8	2.00	1.89	
630.0	7.01	195.03	629.0	-23.8	0.9	21.2	2.00	1.91	
660.0	7.59	196.33	658.8	-27.4	-0.1	25.0	2.00	1.92	
690.0	8.17	197.44	688.5	-31.4	-1.3	29.1	2.00	1.93	
720.0	8.75	198.41	718.2	-35.6	-2.7	33.4	2.00	1.94	
750.0	9.34	199.26	747.8	-40.0	-4.2	38.1	2.00	1.95	
780.0	9.92	200.00	777.4	-44.8	-5.9	43.1	2.00	1.96	
810.0	10.51	200.67	806.9	-49.8	-7.7	48.4	2.00	1.96	
840.0	11.10	201.26	836.4	-55.0	-9.7	54.1	2.00	1.97	
870.0	11.69	201.80	865.8	-60.5	-11.9	60.0	2.00	1.97	
900.0	12.28	202.28	895.1	-66.3	-14.3	66.2	2.00	1.97	
930.0	12.88	202.73	924.4	-72.3	-16.8	72.7	2.00	1.97	
960.0	13.47	203.13	953.6	-78.6	-19.4	79.6	2.00	1.98	
990.0	14.06	203.50	982.7	-85.2	-22.2	86.7	2.00	1.98	
1,020.0	14.66	203.84	1,011.8	-92.0	-25.2	94.1	2.00	1.98	
1,050.0	15.25	204.15	1,040.8	-99.1	-28.4	101.9	2.00	1.98	
1,076.5	15.77	204.41	1,066.3	-105.5	-31.3	109.0	2.00	1.98	EOB; Inc=15.77°
1,080.0	15.77	204.41	1,069.7	-106.4	-31.7	109.9	0.00	0.00	
1,110.0	15.77	204.41	1,098.6	-113.8	-35.1	118.1	0.00	0.00	
1,140.0	15.77	204.41	1,127.4	-121.3	-38.4	126.2	0.00	0.00	
1,170.0	15.77	204.41	1,156.3	-128.7	-41.8	134.4	0.00	0.00	
1,200.0	15.77	204.41	1,185.2	-136.1	-45.2	142.5	0.00	0.00	
1,230.0	15.77	204.41	1,214.0	-143.5	-48.5	150.7	0.00	0.00	
1,260.0	15.77	204.41	1,242.9	-151.0	-51.9	158.8	0.00	0.00	
1,290.0	15.77	204.41	1,271.8	-158.4	-55.3	167.0	0.00	0.00	
1,320.0	15.77	204.41	1,300.6	-165.8	-58.6	175.2	0.00	0.00	
1,350.0	15.77	204.41	1,329.5	-173.2	-62.0	183.3	0.00	0.00	
1,380.0	15.77	204.41	1,358.4	-180.7	-65.4	191.5	0.00	0.00	
1,410.0	15.77	204.41	1,387.3	-188.1	-68.8	199.6	0.00	0.00	
1,440.0	15.77	204.41	1,416.1	-195.5	-72.1	207.8	0.00	0.00	
1,470.0	15.77	204.41	1,445.0	-202.9	-75.5	215.9	0.00	0.00	

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Project:	Garfield County	**MD Reference:**	KBE @ 8293.0ft (Original Well Elev)
Site:	NENE S21-T6S-R96W (B21 696 Pad)	**North Reference:**	True
Well:	OM07D B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
1,500.0	15.77	204.41	1,473.9	-210.4	-78.9	224.1	0.00	0.00	
1,530.0	15.77	204.41	1,502.7	-217.8	-82.2	232.2	0.00	0.00	
1,560.0	15.77	204.41	1,531.6	-225.2	-85.6	240.4	0.00	0.00	
1,590.0	15.77	204.41	1,560.5	-232.7	-89.0	248.6	0.00	0.00	
1,620.0	15.77	204.41	1,589.3	-240.1	-92.4	256.7	0.00	0.00	
1,650.0	15.77	204.41	1,618.2	-247.5	-95.7	264.9	0.00	0.00	
1,680.0	15.77	204.41	1,647.1	-254.9	-99.1	273.0	0.00	0.00	
1,710.0	15.77	204.41	1,676.0	-262.4	-102.5	281.2	0.00	0.00	
1,740.0	15.77	204.41	1,704.8	-269.8	-105.8	289.3	0.00	0.00	
1,770.0	15.77	204.41	1,733.7	-277.2	-109.2	297.5	0.00	0.00	
1,800.0	15.77	204.41	1,762.6	-284.6	-112.6	305.6	0.00	0.00	
1,830.0	15.77	204.41	1,791.4	-292.1	-115.9	313.8	0.00	0.00	
1,860.0	15.77	204.41	1,820.3	-299.5	-119.3	322.0	0.00	0.00	
1,890.0	15.77	204.41	1,849.2	-306.9	-122.7	330.1	0.00	0.00	
1,920.0	15.77	204.41	1,878.0	-314.3	-126.1	338.3	0.00	0.00	
1,950.0	15.77	204.41	1,906.9	-321.8	-129.4	346.4	0.00	0.00	
1,980.0	15.77	204.41	1,935.8	-329.2	-132.8	354.6	0.00	0.00	
2,010.0	15.77	204.41	1,964.7	-336.6	-136.2	362.7	0.00	0.00	
2,040.0	15.77	204.41	1,993.5	-344.1	-139.5	370.9	0.00	0.00	
2,070.0	15.77	204.41	2,022.4	-351.5	-142.9	379.0	0.00	0.00	
2,100.0	15.77	204.41	2,051.3	-358.9	-146.3	387.2	0.00	0.00	
2,130.0	15.77	204.41	2,080.1	-366.3	-149.7	395.4	0.00	0.00	
2,160.0	15.77	204.41	2,109.0	-373.8	-153.0	403.5	0.00	0.00	
2,190.0	15.77	204.41	2,137.9	-381.2	-156.4	411.7	0.00	0.00	
2,220.0	15.77	204.41	2,166.7	-388.6	-159.8	419.8	0.00	0.00	
2,250.0	15.77	204.41	2,195.6	-396.0	-163.1	428.0	0.00	0.00	
2,280.0	15.77	204.41	2,224.5	-403.5	-166.5	436.1	0.00	0.00	
2,310.0	15.77	204.41	2,253.4	-410.9	-169.9	444.3	0.00	0.00	
2,340.0	15.77	204.41	2,282.2	-418.3	-173.2	452.4	0.00	0.00	
2,370.0	15.77	204.41	2,311.1	-425.7	-176.6	460.6	0.00	0.00	
2,400.0	15.77	204.41	2,340.0	-433.2	-180.0	468.8	0.00	0.00	
2,430.0	15.77	204.41	2,368.8	-440.6	-183.4	476.9	0.00	0.00	
2,460.0	15.77	204.41	2,397.7	-448.0	-186.7	485.1	0.00	0.00	
2,490.0	15.77	204.41	2,426.6	-455.5	-190.1	493.2	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
OM07D B21 696 BHL	0.00	0.00	9,811.0	-1,514.1	-696.1	1,621,030.19	2,263,330.29	39.509430	-108.111322
- plan misses target center by 7477.1ft at 2490.0ft MD (2426.6 TVD, -455.5 N, -190.1 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									
OM07D B21 696 TGT	0.00	0.00	6,861.0	-1,494.1	-661.5	1,621,049.22	2,263,365.46	39.509485	-108.111199
- plan misses target center by 4578.8ft at 2490.0ft MD (2426.6 TVD, -455.5 N, -190.1 E)									
- Point									

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Well:	OM07D 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	15.77	204.41	2,436.2	-457.9	-191.2	495.9	0.00	0.00	
2,525.8	15.77	204.41	2,461.0	-464.3	-194.1	502.9	0.00	0.00	Wasatch
2,600.0	15.77	204.41	2,532.4	-482.7	-202.5	523.1	0.00	0.00	
2,700.0	15.77	204.41	2,628.7	-507.4	-213.7	550.3	0.00	0.00	
2,800.0	15.77	204.41	2,724.9	-532.2	-224.9	577.5	0.00	0.00	
2,900.0	15.77	204.41	2,821.1	-557.0	-236.2	604.7	0.00	0.00	
3,000.0	15.77	204.41	2,917.4	-581.7	-247.4	631.9	0.00	0.00	
3,100.0	15.77	204.41	3,013.6	-606.5	-258.6	659.1	0.00	0.00	
3,200.0	15.77	204.41	3,109.8	-631.2	-269.9	686.2	0.00	0.00	
3,300.0	15.77	204.41	3,206.1	-656.0	-281.1	713.4	0.00	0.00	
3,400.0	15.77	204.41	3,302.3	-680.7	-292.3	740.6	0.00	0.00	
3,500.0	15.77	204.41	3,398.5	-705.5	-303.6	767.8	0.00	0.00	
3,600.0	15.77	204.41	3,494.8	-730.2	-314.8	795.0	0.00	0.00	
3,700.0	15.77	204.41	3,591.0	-755.0	-326.0	822.2	0.00	0.00	
3,800.0	15.77	204.41	3,687.2	-779.8	-337.3	849.4	0.00	0.00	
3,900.0	15.77	204.41	3,783.5	-804.5	-348.5	876.5	0.00	0.00	
4,000.0	15.77	204.41	3,879.7	-829.3	-359.7	903.7	0.00	0.00	
4,100.0	15.77	204.41	3,975.9	-854.0	-371.0	930.9	0.00	0.00	
4,200.0	15.77	204.41	4,072.2	-878.8	-382.2	958.1	0.00	0.00	
4,300.0	15.77	204.41	4,168.4	-903.5	-393.4	985.3	0.00	0.00	
4,400.0	15.77	204.41	4,264.6	-928.3	-404.7	1,012.5	0.00	0.00	
4,500.0	15.77	204.41	4,360.9	-953.0	-415.9	1,039.7	0.00	0.00	
4,600.0	15.77	204.41	4,457.1	-977.8	-427.1	1,066.8	0.00	0.00	
4,700.0	15.77	204.41	4,553.3	-1,002.6	-438.4	1,094.0	0.00	0.00	
4,800.0	15.77	204.41	4,649.6	-1,027.3	-449.6	1,121.2	0.00	0.00	
4,900.0	15.77	204.41	4,745.8	-1,052.1	-460.8	1,148.4	0.00	0.00	
5,000.0	15.77	204.41	4,842.0	-1,076.8	-472.1	1,175.6	0.00	0.00	
5,100.0	15.77	204.41	4,938.3	-1,101.6	-483.3	1,202.8	0.00	0.00	
5,200.0	15.77	204.41	5,034.5	-1,126.3	-494.6	1,230.0	0.00	0.00	
5,227.5	15.77	204.41	5,061.0	-1,133.2	-497.6	1,237.4	0.00	0.00	Fort Union
5,300.0	15.77	204.41	5,130.7	-1,151.1	-505.8	1,257.1	0.00	0.00	
5,400.0	15.77	204.41	5,227.0	-1,175.9	-517.0	1,284.3	0.00	0.00	
5,500.0	15.77	204.41	5,323.2	-1,200.6	-528.3	1,311.5	0.00	0.00	
5,600.0	15.77	204.41	5,419.4	-1,225.4	-539.5	1,338.7	0.00	0.00	
5,700.0	15.77	204.41	5,515.7	-1,250.1	-550.7	1,365.9	0.00	0.00	
5,800.0	15.77	204.41	5,611.9	-1,274.9	-562.0	1,393.1	0.00	0.00	
5,900.0	15.77	204.41	5,708.2	-1,299.6	-573.2	1,420.2	0.00	0.00	
6,000.0	15.77	204.41	5,804.4	-1,324.4	-584.4	1,447.4	0.00	0.00	
6,100.0	15.77	204.41	5,900.6	-1,349.1	-595.7	1,474.6	0.00	0.00	
6,200.0	15.77	204.41	5,996.9	-1,373.9	-606.9	1,501.8	0.00	0.00	
6,288.7	15.77	204.41	6,082.2	-1,395.9	-616.9	1,525.9	0.00	0.00	Start Drop -2.00
6,300.0	15.55	204.41	6,093.1	-1,398.6	-618.1	1,529.0	2.00	-2.00	
6,400.0	13.55	204.41	6,189.9	-1,421.5	-628.5	1,554.1	2.00	-2.00	
6,500.0	11.55	204.41	6,287.5	-1,441.3	-637.5	1,575.8	2.00	-2.00	
6,600.0	9.55	204.41	6,385.8	-1,458.0	-645.0	1,594.1	2.00	-2.00	
6,676.1	8.03	204.41	6,461.0	-1,468.5	-649.9	1,605.7	2.00	-2.00	Ohio Creek
6,700.0	7.55	204.41	6,484.7	-1,471.5	-651.2	1,609.0	2.00	-2.00	
6,800.0	5.55	204.41	6,584.0	-1,481.9	-655.9	1,620.4	2.00	-2.00	
6,877.3	4.00	204.41	6,661.0	-1,487.7	-658.6	1,626.8	2.00	-2.00	Williams Fork
6,900.0	3.55	204.41	6,683.7	-1,489.1	-659.2	1,628.3	2.00	-2.00	
7,000.0	1.55	204.41	6,783.6	-1,493.1	-661.0	1,632.8	2.00	-2.00	
7,077.4	0.00	0.00	6,861.0	-1,494.1	-661.5	1,633.8	2.00	-2.00	EOD; Inc=0° - Approx TOG - OM07D B21 696 T

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D 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	0.06	239.93	6,883.6	-1,494.1	-661.5	1,633.8	0.25	0.25	
7,200.0	0.31	239.93	6,983.6	-1,494.3	-661.7	1,634.1	0.25	0.25	
7,300.0	0.56	239.93	7,083.6	-1,494.6	-662.4	1,634.7	0.25	0.25	
7,400.0	0.81	239.93	7,183.6	-1,495.2	-663.4	1,635.7	0.25	0.25	
7,406.4	0.82	239.93	7,190.0	-1,495.3	-663.5	1,635.7	0.25	0.25	
7,500.0	0.82	239.93	7,283.6	-1,496.0	-664.7	1,636.8	0.00	0.00	
7,600.0	0.82	239.93	7,383.6	-1,496.7	-665.9	1,638.0	0.00	0.00	
7,700.0	0.82	239.93	7,483.5	-1,497.4	-667.1	1,639.2	0.00	0.00	
7,800.0	0.82	239.93	7,583.5	-1,498.1	-668.4	1,640.3	0.00	0.00	
7,900.0	0.82	239.93	7,683.5	-1,498.8	-669.6	1,641.5	0.00	0.00	
8,000.0	0.82	239.93	7,783.5	-1,499.6	-670.9	1,642.7	0.00	0.00	
8,100.0	0.82	239.93	7,883.5	-1,500.3	-672.1	1,643.9	0.00	0.00	
8,200.0	0.82	239.93	7,983.5	-1,501.0	-673.4	1,645.0	0.00	0.00	
8,300.0	0.82	239.93	8,083.5	-1,501.7	-674.6	1,646.2	0.00	0.00	
8,400.0	0.82	239.93	8,183.5	-1,502.4	-675.8	1,647.4	0.00	0.00	
8,500.0	0.82	239.93	8,283.5	-1,503.1	-677.1	1,648.6	0.00	0.00	
8,600.0	0.82	239.93	8,383.5	-1,503.9	-678.3	1,649.7	0.00	0.00	
8,700.0	0.82	239.93	8,483.4	-1,504.6	-679.6	1,650.9	0.00	0.00	
8,800.0	0.82	239.93	8,583.4	-1,505.3	-680.8	1,652.1	0.00	0.00	
8,900.0	0.82	239.93	8,683.4	-1,506.0	-682.0	1,653.2	0.00	0.00	
9,000.0	0.82	239.93	8,783.4	-1,506.7	-683.3	1,654.4	0.00	0.00	
9,100.0	0.82	239.93	8,883.4	-1,507.5	-684.5	1,655.6	0.00	0.00	
9,200.0	0.82	239.93	8,983.4	-1,508.2	-685.8	1,656.8	0.00	0.00	
9,300.0	0.82	239.93	9,083.4	-1,508.9	-687.0	1,657.9	0.00	0.00	
9,400.0	0.82	239.93	9,183.4	-1,509.6	-688.3	1,659.1	0.00	0.00	
9,500.0	0.82	239.93	9,283.4	-1,510.3	-689.5	1,660.3	0.00	0.00	
9,527.6	0.82	239.93	9,311.0	-1,510.5	-689.8	1,660.6	0.00	0.00	Cameo
9,600.0	0.82	239.93	9,383.3	-1,511.1	-690.7	1,661.5	0.00	0.00	
9,700.0	0.82	239.93	9,483.3	-1,511.8	-692.0	1,662.6	0.00	0.00	
9,800.0	0.82	239.93	9,583.3	-1,512.5	-693.2	1,663.8	0.00	0.00	
9,877.7	0.82	239.93	9,661.0	-1,513.1	-694.2	1,664.7	0.00	0.00	Rollins SS
9,900.0	0.82	239.93	9,683.3	-1,513.2	-694.5	1,665.0	0.00	0.00	
10,000.0	0.82	239.93	9,783.3	-1,513.9	-695.7	1,666.1	0.00	0.00	
10,027.7	0.82	239.93	9,811.0	-1,514.1	-696.1	1,666.5	0.00	0.00	OM07D 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
OM07D B21 696 BHL - plan hits target center - Rectangle (sides W50.0 H100.0 D0.0)	0.00	0.00	9,811.0	-1,514.1	-696.1	1,621,030.19	2,263,330.29	39.509430	-108.111322
OM07D B21 696 TGT - plan hits target center - Point	0.00	0.00	6,861.0	-1,494.1	-661.5	1,621,049.22	2,263,365.46	39.509485	-108.111199

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,525.8	2,461.0	Wasatch		0.00	
5,227.5	5,061.0	Fort Union		0.00	
6,676.1	6,461.0	Ohio Creek		0.00	
6,877.3	6,661.0	Williams Fork		0.00	
7,077.4	6,861.0	Approx TOG		0.00	
9,527.6	9,311.0	Cameo		0.00	
9,877.7	9,661.0	Rollins SS		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
200.0	200.0	0.0	0.0	KOP @ 200' MD
1,076.5	1,066.3	-105.5	-31.3	EOB; Inc=15.77°
6,288.7	6,082.2	-1,395.9	-616.9	Start Drop -2.00
7,077.4	6,861.0	-1,494.1	-661.5	EOD; Inc=0°
10,027.7	9,811.0	-1,514.1	-696.1	TD at 10027.7

Berry Petroleum Company (NAD 83)

Garfield County
NENE S21-T6S-R96W (B21 696 Pad)
OM07D 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 OM07D 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:	OM07D 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	10,027.7	Plan #1 (DD)	MWD	Geolink MWD

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
NENE S21-T6S-R96W (B21 696 Pad)						
OM02B B21 696 - DD - Plan #1	697.2	720.6	186.6	183.9	68.354	CC
OM02B B21 696 - DD - Plan #1	700.0	723.5	186.6	183.9	67.997	ES
OM02B B21 696 - DD - Plan #1	5,100.0	4,925.5	1,386.3	1,354.5	43.568	SF
OM02C B21 696 - DD - Plan #1	337.2	338.4	59.4	58.3	52.033	CC, ES
OM02C B21 696 - DD - Plan #1	700.0	699.0	85.8	83.1	32.040	SF
OM02D B21 696 - DD - Plan #1	200.0	200.0	30.2	29.5	46.748	CC
OM02D B21 696 - DD - Plan #1	300.0	300.0	30.4	29.4	30.448	ES
OM02D B21 696 - DD - Plan #1	500.0	499.7	38.9	37.2	22.893	SF
OM07A B21 696 - DD - Plan #1	200.0	200.0	20.1	19.4	31.094	CC
OM07A B21 696 - DD - Plan #1	300.0	300.0	20.3	19.3	20.355	ES
OM07A B21 696 - DD - Plan #1	400.0	399.9	22.9	21.6	16.970	SF
OM07B B21 696 - DD - Plan #1	200.0	200.0	10.1	9.5	15.655	CC
OM07B B21 696 - DD - Plan #1	300.0	300.0	10.4	9.4	10.422	ES
OM07B B21 696 - DD - Plan #1	400.0	399.9	13.3	12.0	9.897	SF
OM07C B21 696 - DD - Plan #1	271.0	271.0	9.6	8.7	10.735	CC
OM07C B21 696 - DD - Plan #1	300.0	300.0	9.7	8.7	9.671	ES
OM07C B21 696 - DD - Plan #1	10,027.7	9,998.7	460.4	394.6	7.001	SF
OM08B B21 696 - DD - Plan #1	200.0	200.0	40.2	39.5	62.187	CC
OM08B B21 696 - DD - Plan #1	300.0	300.0	40.4	39.4	40.428	ES
OM08B B21 696 - DD - Plan #1	10,027.7	9,917.6	1,158.5	1,108.8	23.308	SF
OM08C B21 696 - DD - Plan #1	200.0	200.0	50.3	49.6	77.842	CC
OM08C B21 696 - DD - Plan #1	300.0	300.0	50.5	49.5	50.541	ES
OM08C B21 696 - DD - Plan #1	10,027.7	9,982.2	1,179.0	1,119.7	19.890	SF
OM08D B21 696 - DD - Plan #1	429.2	432.6	67.9	66.4	45.565	CC, ES
OM08D B21 696 - DD - Plan #1	10,027.7	10,076.6	1,393.5	1,328.0	21.280	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D 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	70.09	69.6	192.1	204.3				
100.0	100.0	100.0	100.0	0.1	0.1	70.09	69.6	192.1	204.3	204.0	0.30	688.694	
200.0	200.0	200.0	200.0	0.3	0.3	70.09	69.6	192.1	204.3	203.7	0.65	316.427	
300.0	300.0	306.3	306.3	0.5	0.5	-55.68	70.0	190.2	201.8	200.8	1.01	199.850	
400.0	399.9	412.0	411.8	0.7	0.7	-101.12	71.2	184.5	196.7	195.3	1.39	141.561	
500.0	499.7	517.0	516.3	0.9	1.0	-122.12	73.3	175.0	191.8	190.0	1.80	106.752	
600.0	599.2	620.8	619.3	1.1	1.3	-134.89	76.1	162.0	188.1	185.9	2.25	83.763	
697.2	695.6	720.6	717.7	1.4	1.6	-145.14	79.6	146.0	186.6	183.9	2.73	68.354	CC
700.0	698.4	723.5	720.5	1.4	1.6	-145.43	79.7	145.5	186.6	183.9	2.74	67.997	ES
800.0	797.0	823.4	818.5	1.7	2.0	-155.30	83.9	126.3	188.9	185.6	3.28	57.537	
900.0	895.1	920.0	913.1	2.1	2.3	-164.15	88.2	106.8	197.1	193.3	3.81	51.670	
1,000.0	992.4	1,016.1	1,007.1	2.5	2.7	-171.88	92.4	87.5	211.7	207.3	4.33	48.847	
1,100.0	1,088.9	1,111.7	1,100.6	3.0	3.1	-178.19	96.6	68.3	232.0	227.1	4.85	47.860	
1,200.0	1,185.2	1,207.0	1,193.9	3.4	3.5	177.21	100.7	49.1	255.1	249.7	5.39	47.321	
1,300.0	1,281.4	1,302.4	1,287.2	3.9	3.8	173.37	104.9	29.9	279.5	273.6	5.95	46.969	
1,400.0	1,377.6	1,397.7	1,380.5	4.4	4.2	170.14	109.1	10.7	305.0	298.5	6.53	46.688	
1,500.0	1,473.9	1,493.1	1,473.8	4.9	4.6	167.41	113.3	-8.5	331.2	324.1	7.13	46.432	
1,600.0	1,570.1	1,588.4	1,567.1	5.4	5.0	165.07	117.5	-27.6	358.1	350.4	7.75	46.189	
1,700.0	1,666.3	1,683.8	1,660.5	5.9	5.4	163.05	121.6	-46.8	385.5	377.1	8.39	45.958	
1,800.0	1,762.6	1,779.1	1,753.8	6.4	5.8	161.30	125.8	-66.0	413.2	404.2	9.03	45.742	
1,900.0	1,858.8	1,874.5	1,847.1	6.9	6.1	159.77	130.0	-85.2	441.3	431.6	9.69	45.541	
2,000.0	1,955.0	1,969.8	1,940.4	7.4	6.5	158.42	134.2	-104.4	469.6	459.2	10.35	45.357	
2,100.0	2,051.3	2,065.1	2,033.7	7.9	6.9	157.22	138.4	-123.5	498.1	487.1	11.02	45.189	
2,200.0	2,147.5	2,160.5	2,127.0	8.4	7.3	156.15	142.6	-142.7	526.8	515.1	11.70	45.037	
2,300.0	2,243.7	2,255.8	2,220.3	8.9	7.7	155.19	146.7	-161.9	555.7	543.3	12.38	44.899	
2,400.0	2,340.0	2,351.2	2,313.6	9.4	8.1	154.33	150.9	-181.1	584.7	571.6	13.06	44.775	
2,500.0	2,436.2	2,446.5	2,406.9	9.9	8.5	153.54	155.1	-200.3	613.8	600.0	13.74	44.663	
2,600.0	2,532.4	2,541.9	2,500.2	10.4	8.8	152.83	159.3	-219.4	643.0	628.6	14.43	44.561	
2,700.0	2,628.7	2,637.2	2,593.5	10.9	9.2	152.18	163.5	-238.6	672.3	657.2	15.12	44.469	
2,800.0	2,724.9	2,732.6	2,686.8	11.5	9.6	151.58	167.6	-257.8	701.6	685.8	15.81	44.386	
2,900.0	2,821.1	2,827.9	2,780.1	12.0	10.0	151.03	171.8	-277.0	731.1	714.6	16.50	44.310	
3,000.0	2,917.4	2,923.3	2,873.4	12.5	10.4	150.53	176.0	-296.2	760.5	743.4	17.19	44.241	
3,100.0	3,013.6	3,018.6	2,966.7	13.0	10.8	150.06	180.2	-315.3	790.1	772.2	17.88	44.178	
3,200.0	3,109.8	3,114.0	3,060.0	13.5	11.2	149.62	184.4	-334.5	819.6	801.1	18.58	44.120	
3,300.0	3,206.1	3,209.3	3,153.3	14.0	11.5	149.22	188.5	-353.7	849.3	830.0	19.27	44.068	
3,400.0	3,302.3	3,304.7	3,246.6	14.5	11.9	148.84	192.7	-372.9	878.9	859.0	19.97	44.019	
3,500.0	3,398.5	3,400.0	3,339.9	15.0	12.3	148.49	196.9	-392.1	908.6	887.9	20.66	43.975	
3,600.0	3,494.8	3,495.3	3,433.2	15.5	12.7	148.16	201.1	-411.2	938.3	917.0	21.36	43.933	
3,700.0	3,591.0	3,590.7	3,526.5	16.0	13.1	147.84	205.3	-430.4	968.1	946.0	22.05	43.895	
3,800.0	3,687.2	3,686.0	3,619.8	16.5	13.5	147.55	209.4	-449.6	997.8	975.1	22.75	43.860	
3,900.0	3,783.5	3,781.4	3,713.1	17.0	13.9	147.28	213.6	-468.8	1,027.6	1,004.2	23.45	43.828	
4,000.0	3,879.7	3,876.7	3,806.4	17.5	14.3	147.02	217.8	-488.0	1,057.4	1,033.3	24.14	43.797	
4,100.0	3,975.9	3,972.1	3,899.7	18.0	14.6	146.77	222.0	-507.1	1,087.3	1,062.4	24.84	43.769	
4,200.0	4,072.2	4,067.4	3,993.1	18.6	15.0	146.54	226.2	-526.3	1,117.1	1,091.6	25.54	43.743	
4,300.0	4,168.4	4,162.8	4,086.4	19.1	15.4	146.32	230.3	-545.5	1,147.0	1,120.7	26.24	43.718	
4,400.0	4,264.6	4,258.1	4,179.7	19.6	15.8	146.11	234.5	-564.7	1,176.8	1,149.9	26.93	43.695	
4,500.0	4,360.9	4,353.5	4,273.0	20.1	16.2	145.91	238.7	-583.9	1,206.7	1,179.1	27.63	43.673	
4,600.0	4,457.1	4,448.8	4,366.3	20.6	16.6	145.72	242.9	-603.0	1,236.6	1,208.3	28.33	43.653	
4,700.0	4,553.3	4,544.2	4,459.6	21.1	17.0	145.54	247.1	-622.2	1,266.5	1,237.5	29.03	43.634	
4,800.0	4,649.6	4,639.5	4,552.9	21.6	17.3	145.37	251.2	-641.4	1,296.5	1,266.7	29.72	43.616	
4,900.0	4,745.8	4,734.9	4,646.2	22.1	17.7	145.20	255.4	-660.6	1,326.4	1,296.0	30.42	43.599	
5,000.0	4,842.0	4,830.2	4,739.5	22.6	18.1	145.05	259.6	-679.8	1,356.3	1,325.2	31.12	43.583	

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 OM07D 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:	OM07D B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

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

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,938.3	4,925.5	4,832.8	23.1	18.5	144.90	263.8	-698.9	1,386.3	1,354.5	31.82	43.568 SF	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D 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	52.5	29.6	60.2				
100.0	100.0	100.0	100.0	0.1	0.1	29.46	52.5	29.6	60.2	59.9	0.30	203.023	
200.0	200.0	200.0	200.0	0.3	0.3	29.46	52.5	29.6	60.2	59.6	0.65	93.281	
300.0	300.0	300.9	300.9	0.5	0.5	-98.72	52.4	27.8	59.6	58.6	1.00	59.429	
337.2	337.2	338.4	338.3	0.6	0.6	-121.25	52.4	26.3	59.4	58.3	1.14	52.033	CC, ES
400.0	399.9	401.4	401.3	0.7	0.7	-149.65	52.4	22.5	60.1	58.7	1.38	43.642	
500.0	499.7	501.4	500.8	0.9	0.9	-176.46	52.4	13.8	64.2	62.4	1.77	36.189	
600.0	599.2	600.6	599.3	1.1	1.2	166.32	52.3	1.7	72.7	70.5	2.21	32.951	
700.0	698.4	699.0	696.6	1.4	1.5	154.07	52.2	-13.4	85.8	83.1	2.68	32.040	SF
800.0	797.0	797.3	793.6	1.7	1.8	146.55	52.1	-29.1	102.6	99.5	3.18	32.262	
900.0	895.1	895.3	890.3	2.1	2.1	142.38	52.0	-44.6	122.3	118.6	3.72	32.869	
1,000.0	992.4	992.8	986.6	2.5	2.4	140.30	52.0	-60.2	144.3	140.0	4.29	33.625	
1,100.0	1,088.9	1,089.8	1,082.4	3.0	2.7	139.80	51.9	-75.6	168.6	163.7	4.89	34.488	
1,200.0	1,185.2	1,186.6	1,178.0	3.4	3.0	140.44	51.8	-91.0	193.5	188.0	5.50	35.202	
1,300.0	1,281.4	1,283.4	1,273.5	3.9	3.4	140.93	51.7	-106.4	218.5	212.4	6.11	35.743	
1,400.0	1,377.6	1,380.3	1,369.1	4.4	3.7	141.32	51.6	-121.8	243.5	236.8	6.73	36.165	
1,500.0	1,473.9	1,477.1	1,464.7	4.9	4.0	141.64	51.5	-137.2	268.5	261.1	7.36	36.503	
1,600.0	1,570.1	1,573.9	1,560.3	5.4	4.3	141.91	51.5	-152.6	293.5	285.5	7.98	36.779	
1,700.0	1,666.3	1,670.7	1,655.9	5.9	4.6	142.13	51.4	-168.0	318.5	309.9	8.61	37.008	
1,800.0	1,762.6	1,767.5	1,751.5	6.4	5.0	142.32	51.3	-183.4	343.5	334.2	9.23	37.201	
1,900.0	1,858.8	1,864.3	1,847.0	6.9	5.3	142.49	51.2	-198.8	368.5	358.6	9.86	37.367	
2,000.0	1,955.0	1,961.2	1,942.6	7.4	5.6	142.63	51.1	-214.2	393.5	383.0	10.49	37.509	
2,100.0	2,051.3	2,058.0	2,038.2	7.9	5.9	142.76	51.0	-229.6	418.5	407.4	11.12	37.634	
2,200.0	2,147.5	2,154.8	2,133.8	8.4	6.2	142.87	50.9	-244.9	443.5	431.8	11.75	37.743	
2,300.0	2,243.7	2,251.6	2,229.4	8.9	6.5	142.97	50.9	-260.3	468.5	456.2	12.38	37.840	
2,400.0	2,340.0	2,348.4	2,325.0	9.4	6.9	143.06	50.8	-275.7	493.6	480.6	13.01	37.927	
2,500.0	2,436.2	2,445.3	2,420.6	9.9	7.2	143.14	50.7	-291.1	518.6	504.9	13.65	38.004	
2,600.0	2,532.4	2,542.1	2,516.1	10.4	7.5	143.21	50.6	-306.5	543.6	529.3	14.28	38.075	
2,700.0	2,628.7	2,638.9	2,611.7	10.9	7.8	143.28	50.5	-321.9	568.6	553.7	14.91	38.138	
2,800.0	2,724.9	2,735.7	2,707.3	11.5	8.1	143.34	50.4	-337.3	593.6	578.1	15.54	38.196	
2,900.0	2,821.1	2,832.5	2,802.9	12.0	8.5	143.40	50.4	-352.7	618.7	602.5	16.17	38.249	
3,000.0	2,917.4	2,929.3	2,898.5	12.5	8.8	143.45	50.3	-368.1	643.7	626.9	16.81	38.297	
3,100.0	3,013.6	3,026.2	2,994.1	13.0	9.1	143.50	50.2	-383.5	668.7	651.3	17.44	38.342	
3,200.0	3,109.8	3,123.0	3,089.7	13.5	9.4	143.55	50.1	-398.9	693.7	675.7	18.07	38.384	
3,300.0	3,206.1	3,219.8	3,185.2	14.0	9.7	143.59	50.0	-414.3	718.8	700.1	18.71	38.422	
3,400.0	3,302.3	3,316.6	3,280.8	14.5	10.1	143.63	49.9	-429.7	743.8	724.4	19.34	38.458	
3,500.0	3,398.5	3,413.4	3,376.4	15.0	10.4	143.66	49.9	-445.1	768.8	748.8	19.97	38.491	
3,600.0	3,494.8	3,510.2	3,472.0	15.5	10.7	143.70	49.8	-460.5	793.8	773.2	20.61	38.522	
3,700.0	3,591.0	3,607.1	3,567.6	16.0	11.0	143.73	49.7	-475.9	818.9	797.6	21.24	38.551	
3,800.0	3,687.2	3,703.9	3,663.2	16.5	11.3	143.76	49.6	-491.3	843.9	822.0	21.87	38.578	
3,900.0	3,783.5	3,800.7	3,758.7	17.0	11.7	143.79	49.5	-506.7	868.9	846.4	22.51	38.603	
4,000.0	3,879.7	3,897.5	3,854.3	17.5	12.0	143.82	49.4	-522.1	893.9	870.8	23.14	38.628	
4,100.0	3,975.9	3,994.3	3,949.9	18.0	12.3	143.84	49.3	-537.5	919.0	895.2	23.78	38.650	
4,200.0	4,072.2	4,091.1	4,045.5	18.6	12.6	143.87	49.3	-552.9	944.0	919.6	24.41	38.672	
4,300.0	4,168.4	4,188.0	4,141.1	19.1	12.9	143.89	49.2	-568.3	969.0	944.0	25.04	38.692	
4,400.0	4,264.6	4,284.8	4,236.7	19.6	13.3	143.91	49.1	-583.7	994.0	968.4	25.68	38.711	
4,500.0	4,360.9	4,381.6	4,332.3	20.1	13.6	143.93	49.0	-599.1	1,019.1	992.8	26.31	38.729	
4,600.0	4,457.1	4,478.4	4,427.8	20.6	13.9	143.95	48.9	-614.5	1,044.1	1,017.1	26.95	38.747	
4,700.0	4,553.3	4,575.2	4,523.4	21.1	14.2	143.97	48.8	-629.9	1,069.1	1,041.5	27.58	38.763	
4,800.0	4,649.6	4,672.0	4,619.0	21.6	14.5	143.99	48.8	-645.3	1,094.1	1,065.9	28.21	38.779	
4,900.0	4,745.8	4,768.9	4,714.6	22.1	14.9	144.00	48.7	-660.7	1,119.2	1,090.3	28.85	38.794	
5,000.0	4,842.0	4,865.7	4,810.2	22.6	15.2	144.02	48.6	-676.1	1,144.2	1,114.7	29.48	38.808	

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

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D 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	4,938.3	4,962.5	4,905.8	23.1	15.5	144.04	48.5	-691.5	1,169.2	1,139.1	30.12	38.822	
5,200.0	5,034.5	5,059.3	5,001.4	23.6	15.8	144.05	48.4	-706.9	1,194.2	1,163.5	30.75	38.835	
5,300.0	5,130.7	5,156.1	5,096.9	24.1	16.1	144.06	48.3	-722.3	1,219.3	1,187.9	31.39	38.848	
5,400.0	5,227.0	5,253.0	5,192.5	24.6	16.5	144.08	48.3	-737.7	1,244.3	1,212.3	32.02	38.860	
5,500.0	5,323.2	5,349.8	5,288.1	25.2	16.8	144.09	48.2	-753.1	1,269.3	1,236.7	32.65	38.871	
5,600.0	5,419.4	5,446.6	5,383.7	25.7	17.1	144.10	48.1	-768.4	1,294.4	1,261.1	33.29	38.882	
5,700.0	5,515.7	5,543.4	5,479.3	26.2	17.4	144.12	48.0	-783.8	1,319.4	1,285.5	33.92	38.893	
5,800.0	5,611.9	5,640.2	5,574.9	26.7	17.7	144.13	47.9	-799.2	1,344.4	1,309.9	34.56	38.903	
5,900.0	5,708.2	5,737.0	5,670.4	27.2	18.1	144.14	47.8	-814.6	1,369.4	1,334.2	35.19	38.913	
6,000.0	5,804.4	5,833.9	5,766.0	27.7	18.4	144.15	47.7	-830.0	1,394.5	1,358.6	35.83	38.922	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D 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	29.69	26.2	15.0	30.2				
100.0	100.0	100.0	100.0	0.1	0.1	29.69	26.2	15.0	30.2	29.9	0.30	101.746	
200.0	200.0	200.0	200.0	0.3	0.3	29.69	26.2	15.0	30.2	29.5	0.65	46.748	CC
300.0	300.0	300.0	300.0	0.5	0.5	-98.58	26.2	15.0	30.4	29.4	1.00	30.448	ES
400.0	399.9	399.9	399.9	0.7	0.7	-147.58	26.2	15.0	32.8	31.5	1.35	24.290	
500.0	499.7	499.7	499.7	0.9	0.8	-168.54	26.2	15.0	38.9	37.2	1.70	22.893	SF
600.0	599.2	600.2	600.2	1.1	1.0	-179.42	25.6	13.3	47.4	45.4	2.04	23.192	
700.0	698.4	700.6	700.5	1.4	1.2	172.37	23.7	8.4	57.4	55.0	2.39	23.991	
800.0	797.0	800.9	800.4	1.7	1.4	165.53	20.5	0.2	69.1	66.3	2.76	24.987	
900.0	895.1	901.0	899.7	2.1	1.7	159.66	16.1	-11.2	82.6	79.4	3.19	25.909	
1,000.0	992.4	1,000.8	998.3	2.5	2.0	154.57	10.5	-25.8	98.1	94.4	3.69	26.560	
1,100.0	1,088.9	1,100.2	1,095.9	3.0	2.3	150.38	3.6	-43.5	115.6	111.3	4.31	26.840	
1,200.0	1,185.2	1,198.5	1,191.9	3.4	2.6	147.50	-3.8	-62.7	133.6	128.6	4.98	26.813	
1,300.0	1,281.4	1,296.6	1,287.9	3.9	3.0	145.31	-11.2	-81.8	151.9	146.2	5.70	26.672	
1,400.0	1,377.6	1,394.8	1,383.9	4.4	3.4	143.59	-18.6	-101.0	170.4	164.0	6.43	26.493	
1,500.0	1,473.9	1,492.9	1,479.9	4.9	3.8	142.21	-26.0	-120.2	189.0	181.8	7.18	26.310	
1,600.0	1,570.1	1,591.1	1,575.9	5.4	4.2	141.08	-33.5	-139.3	207.7	199.7	7.95	26.136	
1,700.0	1,666.3	1,689.3	1,671.8	5.9	4.5	140.13	-40.9	-158.5	226.4	217.7	8.72	25.977	
1,800.0	1,762.6	1,787.4	1,767.8	6.4	4.9	139.33	-48.3	-177.7	245.2	235.7	9.49	25.832	
1,900.0	1,858.8	1,885.6	1,863.8	6.9	5.3	138.64	-55.7	-196.8	264.0	253.8	10.27	25.702	
2,000.0	1,955.0	1,983.8	1,959.8	7.4	5.7	138.05	-63.1	-216.0	282.9	271.8	11.06	25.586	
2,100.0	2,051.3	2,081.9	2,055.8	7.9	6.1	137.53	-70.5	-235.2	301.8	290.0	11.84	25.481	
2,200.0	2,147.5	2,180.1	2,151.8	8.4	6.5	137.07	-77.9	-254.3	320.7	308.1	12.63	25.386	
2,300.0	2,243.7	2,278.3	2,247.8	8.9	6.9	136.66	-85.4	-273.5	339.6	326.2	13.42	25.300	
2,400.0	2,340.0	2,376.4	2,343.8	9.4	7.3	136.29	-92.8	-292.7	358.6	344.4	14.22	25.223	
2,500.0	2,436.2	2,474.6	2,439.8	9.9	7.7	135.96	-100.2	-311.8	377.5	362.5	15.01	25.152	
2,600.0	2,532.4	2,572.8	2,535.7	10.4	8.1	135.67	-107.6	-331.0	396.5	380.7	15.80	25.088	
2,700.0	2,628.7	2,670.9	2,631.7	10.9	8.5	135.40	-115.0	-350.2	415.5	398.9	16.60	25.029	
2,800.0	2,724.9	2,769.1	2,727.7	11.5	8.9	135.15	-122.4	-369.3	434.5	417.1	17.40	24.975	
2,900.0	2,821.1	2,867.3	2,823.7	12.0	9.3	134.92	-129.9	-388.5	453.5	435.3	18.19	24.925	
3,000.0	2,917.4	2,965.4	2,919.7	12.5	9.7	134.72	-137.3	-407.7	472.5	453.5	18.99	24.879	
3,100.0	3,013.6	3,063.6	3,015.7	13.0	10.1	134.52	-144.7	-426.8	491.5	471.7	19.79	24.836	
3,200.0	3,109.8	3,161.7	3,111.7	13.5	10.5	134.35	-152.1	-446.0	510.5	489.9	20.59	24.797	
3,300.0	3,206.1	3,259.9	3,207.7	14.0	10.9	134.18	-159.5	-465.2	529.5	508.1	21.39	24.760	
3,400.0	3,302.3	3,358.1	3,303.7	14.5	11.3	134.03	-166.9	-484.3	548.5	526.3	22.18	24.726	
3,500.0	3,398.5	3,456.2	3,399.6	15.0	11.7	133.88	-174.3	-503.5	567.5	544.6	22.98	24.693	
3,600.0	3,494.8	3,554.4	3,495.6	15.5	12.1	133.75	-181.8	-522.7	586.6	562.8	23.78	24.663	
3,700.0	3,591.0	3,652.6	3,591.6	16.0	12.5	133.63	-189.2	-541.8	605.6	581.0	24.58	24.635	
3,800.0	3,687.2	3,750.7	3,687.6	16.5	12.9	133.51	-196.6	-561.0	624.6	599.2	25.38	24.608	
3,900.0	3,783.5	3,848.9	3,783.6	17.0	13.3	133.40	-204.0	-580.2	643.7	617.5	26.18	24.583	
4,000.0	3,879.7	3,947.1	3,879.6	17.5	13.7	133.29	-211.4	-599.4	662.7	635.7	26.98	24.560	
4,100.0	3,975.9	4,045.2	3,975.6	18.0	14.1	133.19	-218.8	-618.5	681.7	653.9	27.78	24.537	
4,200.0	4,072.2	4,143.4	4,071.6	18.6	14.5	133.10	-226.3	-637.7	700.8	672.2	28.58	24.516	
4,300.0	4,168.4	4,241.6	4,167.6	19.1	14.9	133.01	-233.7	-656.9	719.8	690.4	29.38	24.496	
4,400.0	4,264.6	4,339.7	4,263.5	19.6	15.3	132.93	-241.1	-676.0	738.8	708.7	30.19	24.477	
4,500.0	4,360.9	4,437.9	4,359.5	20.1	15.7	132.85	-248.5	-695.2	757.9	726.9	30.99	24.459	
4,600.0	4,457.1	4,536.1	4,455.5	20.6	16.1	132.77	-255.9	-714.4	776.9	745.1	31.79	24.442	
4,700.0	4,553.3	4,634.4	4,551.8	21.1	16.5	132.75	-263.1	-732.9	796.0	763.4	32.55	24.453	
4,800.0	4,649.6	4,732.8	4,648.7	21.6	16.8	132.95	-269.2	-748.7	815.0	781.8	33.21	24.538	
4,900.0	4,745.8	4,830.8	4,745.9	22.1	17.1	133.38	-274.0	-761.2	834.0	800.2	33.77	24.695	
5,000.0	4,842.0	4,928.4	4,842.9	22.6	17.3	134.02	-277.7	-770.7	853.1	818.9	34.23	24.923	
5,100.0	4,938.3	5,025.2	4,939.5	23.1	17.5	134.84	-280.1	-777.0	872.4	837.8	34.58	25.226	

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 OM07D 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:	OM07D 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	5,034.5	5,121.1	5,035.3	23.6	17.6	135.82	-281.4	-780.2	891.9	857.1	34.84	25.604	
5,300.0	5,130.7	5,216.9	5,131.1	24.1	17.7	136.95	-281.6	-780.7	911.9	876.9	35.01	26.047	
5,400.0	5,227.0	5,314.1	5,228.3	24.6	17.8	138.06	-281.8	-781.1	932.2	897.1	35.18	26.500	
5,500.0	5,323.2	5,411.1	5,325.3	25.2	17.9	139.10	-282.2	-781.7	952.8	917.4	35.35	26.952	
5,600.0	5,419.4	5,507.5	5,421.7	25.7	18.0	140.09	-282.6	-782.4	973.6	938.1	35.52	27.408	
5,700.0	5,515.7	5,603.9	5,518.1	26.2	18.1	141.03	-283.0	-783.1	994.7	959.0	35.69	27.869	
5,800.0	5,611.9	5,700.3	5,614.5	26.7	18.2	141.94	-283.4	-783.9	1,016.0	980.1	35.86	28.336	
5,900.0	5,708.2	5,796.8	5,710.9	27.2	18.3	142.81	-283.8	-784.6	1,037.6	1,001.6	36.02	28.805	
6,000.0	5,804.4	5,893.2	5,807.4	27.7	18.4	143.64	-284.2	-785.3	1,059.4	1,023.2	36.18	29.278	
6,100.0	5,900.6	5,989.6	5,903.8	28.2	18.5	144.44	-284.6	-786.0	1,081.4	1,045.0	36.35	29.753	
6,200.0	5,996.9	6,086.0	6,000.2	28.7	18.6	145.22	-285.1	-786.7	1,103.6	1,067.1	36.51	30.229	
6,300.0	6,093.1	6,182.5	6,096.6	29.2	18.7	145.98	-285.5	-787.5	1,126.0	1,089.3	36.67	30.705	
6,400.0	6,189.9	6,279.4	6,193.6	29.7	18.8	146.87	-285.9	-788.2	1,146.8	1,110.0	36.83	31.141	
6,500.0	6,287.5	6,377.2	6,291.3	30.1	18.9	147.61	-286.3	-788.9	1,164.9	1,127.9	36.99	31.494	
6,600.0	6,385.8	6,475.6	6,389.7	30.4	19.0	148.21	-286.7	-789.6	1,180.1	1,143.0	37.16	31.760	
6,700.0	6,484.7	6,574.6	6,488.7	30.7	19.2	148.68	-287.2	-790.4	1,192.5	1,155.2	37.33	31.941	
6,800.0	6,584.0	6,674.0	6,588.1	30.9	19.3	149.02	-287.6	-791.1	1,201.9	1,164.4	37.52	32.036	
6,900.0	6,683.7	6,773.7	6,687.9	31.1	19.4	149.24	-288.0	-791.9	1,208.4	1,170.7	37.71	32.046	
7,000.0	6,783.6	6,873.7	6,787.8	31.2	19.5	149.35	-288.4	-792.6	1,211.9	1,174.0	37.90	31.973	
7,100.0	6,883.6	6,973.7	6,887.8	31.2	19.6	113.82	-288.9	-793.4	1,212.4	1,174.3	38.12	31.809	
7,200.0	6,983.6	7,073.6	6,987.8	31.3	19.7	113.80	-289.3	-794.1	1,212.2	1,173.8	38.37	31.593	
7,273.9	7,057.4	7,147.5	7,061.6	31.4	19.8	113.80	-289.6	-794.7	1,212.2	1,173.6	38.56	31.438	
7,300.0	7,083.6	7,173.6	7,087.8	31.4	19.9	113.80	-289.7	-794.8	1,212.2	1,173.6	38.62	31.385	
7,400.0	7,183.6	7,273.6	7,187.8	31.5	20.0	113.81	-290.2	-795.6	1,212.3	1,173.4	38.88	31.184	
7,500.0	7,283.6	7,373.6	7,287.8	31.6	20.1	113.83	-290.6	-796.3	1,212.5	1,173.4	39.12	30.992	
7,600.0	7,383.6	7,473.6	7,387.8	31.7	20.2	113.86	-291.0	-797.1	1,212.8	1,173.4	39.37	30.801	
7,700.0	7,483.5	7,573.6	7,487.8	31.8	20.4	113.88	-291.5	-797.8	1,213.0	1,173.4	39.63	30.611	
7,800.0	7,583.5	7,673.6	7,587.7	31.8	20.5	113.91	-291.9	-798.6	1,213.2	1,173.4	39.88	30.423	
7,900.0	7,683.5	7,773.6	7,687.7	31.9	20.6	113.93	-292.3	-799.3	1,213.5	1,173.3	40.13	30.236	
8,000.0	7,783.5	7,873.6	7,787.7	32.0	20.7	113.96	-292.7	-800.1	1,213.7	1,173.3	40.39	30.051	
8,100.0	7,883.5	7,973.6	7,887.7	32.1	20.9	113.98	-293.2	-800.8	1,213.9	1,173.3	40.65	29.866	
8,200.0	7,983.5	8,073.6	7,987.7	32.2	21.0	114.01	-293.6	-801.6	1,214.2	1,173.3	40.90	29.683	
8,300.0	8,083.5	8,173.6	8,087.7	32.3	21.1	114.03	-294.0	-802.3	1,214.4	1,173.3	41.16	29.502	
8,400.0	8,183.5	8,273.6	8,187.7	32.4	21.2	114.06	-294.5	-803.0	1,214.7	1,173.2	41.43	29.322	
8,500.0	8,283.5	8,373.6	8,287.7	32.5	21.4	114.08	-294.9	-803.8	1,214.9	1,173.2	41.69	29.143	
8,600.0	8,383.5	8,473.6	8,387.7	32.6	21.5	114.11	-295.3	-804.5	1,215.1	1,173.2	41.95	28.965	
8,700.0	8,483.4	8,573.6	8,487.7	32.7	21.6	114.13	-295.8	-805.3	1,215.4	1,173.1	42.22	28.789	
8,800.0	8,583.4	8,673.6	8,587.7	32.8	21.8	114.16	-296.2	-806.0	1,215.6	1,173.1	42.48	28.614	
8,900.0	8,683.4	8,773.6	8,687.7	32.9	21.9	114.18	-296.6	-806.8	1,215.8	1,173.1	42.75	28.441	
9,000.0	8,783.4	8,873.6	8,787.7	33.0	22.0	114.21	-297.0	-807.5	1,216.1	1,173.1	43.02	28.269	
9,100.0	8,883.4	8,973.6	8,887.7	33.1	22.2	114.23	-297.5	-808.3	1,216.3	1,173.0	43.29	28.098	
9,200.0	8,983.4	9,073.6	8,987.7	33.2	22.3	114.26	-297.9	-809.0	1,216.5	1,173.0	43.56	27.929	
9,300.0	9,083.4	9,173.6	9,087.7	33.3	22.4	114.28	-298.3	-809.8	1,216.8	1,173.0	43.83	27.761	
9,400.0	9,183.4	9,273.6	9,187.7	33.4	22.6	114.30	-298.8	-810.5	1,217.0	1,172.9	44.10	27.595	
9,500.0	9,283.4	9,373.6	9,287.7	33.5	22.7	114.33	-299.2	-811.2	1,217.3	1,172.9	44.38	27.430	
9,600.0	9,383.3	9,473.6	9,387.7	33.6	22.8	114.35	-299.6	-812.0	1,217.5	1,172.8	44.65	27.266	
9,700.0	9,483.3	9,573.6	9,487.6	33.7	23.0	114.38	-300.1	-812.7	1,217.7	1,172.8	44.93	27.104	
9,800.0	9,583.3	9,673.6	9,587.6	33.8	23.1	114.40	-300.5	-813.5	1,218.0	1,172.8	45.21	26.943	
9,900.0	9,683.3	9,773.6	9,687.6	33.9	23.2	114.43	-300.9	-814.2	1,218.2	1,172.7	45.48	26.783	
10,000.0	9,783.3	9,873.6	9,787.6	34.0	23.4	114.45	-301.3	-815.0	1,218.5	1,172.7	45.76	26.625	
10,027.7	9,811.0	9,901.3	9,815.3	34.1	23.4	114.46	-301.5	-815.2	1,218.5	1,172.7	45.84	26.582	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D 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	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	CC
300.0	300.0	300.0	300.0	0.5	0.5	-100.44	17.5	9.9	20.3	19.3	1.00	20.355	ES
400.0	399.9	399.9	399.9	0.7	0.7	-151.76	17.5	9.9	22.9	21.6	1.35	16.970	SF
500.0	499.7	499.7	499.7	0.9	0.8	-173.04	17.5	9.9	29.1	27.4	1.70	17.176	
600.0	599.2	600.2	600.2	1.1	1.0	176.73	16.5	8.5	37.4	35.4	2.04	18.351	
700.0	698.4	700.8	700.6	1.4	1.2	169.47	13.4	4.2	46.6	44.2	2.39	19.491	
800.0	797.0	801.4	800.9	1.7	1.4	163.65	8.2	-3.0	56.6	53.8	2.76	20.513	
900.0	895.1	902.1	900.8	2.1	1.7	158.70	1.0	-13.0	67.6	64.4	3.17	21.300	
1,000.0	992.4	1,002.4	999.9	2.5	1.9	154.46	-8.1	-25.7	79.7	76.1	3.65	21.823	
1,100.0	1,088.9	1,101.3	1,097.4	3.0	2.2	152.25	-17.6	-39.0	94.2	90.1	4.17	22.603	
1,200.0	1,185.2	1,200.1	1,194.9	3.4	2.5	151.59	-27.2	-52.3	109.6	104.9	4.71	23.273	
1,300.0	1,281.4	1,298.9	1,292.3	3.9	2.9	151.10	-36.7	-65.6	125.0	119.7	5.26	23.736	
1,400.0	1,377.6	1,397.8	1,389.7	4.4	3.2	150.71	-46.3	-78.9	140.3	134.5	5.83	24.064	
1,500.0	1,473.9	1,496.6	1,487.2	4.9	3.5	150.40	-55.8	-92.2	155.7	149.3	6.41	24.303	
1,600.0	1,570.1	1,595.4	1,584.6	5.4	3.8	150.15	-65.3	-105.5	171.1	164.1	6.99	24.480	
1,700.0	1,666.3	1,694.2	1,682.1	5.9	4.1	149.94	-74.9	-118.7	186.5	178.9	7.58	24.614	
1,800.0	1,762.6	1,793.0	1,779.5	6.4	4.5	149.76	-84.4	-132.0	201.9	193.7	8.17	24.717	
1,900.0	1,858.8	1,891.8	1,877.0	6.9	4.8	149.61	-94.0	-145.3	217.3	208.5	8.76	24.798	
2,000.0	1,955.0	1,990.6	1,974.4	7.4	5.1	149.47	-103.5	-158.6	232.6	223.3	9.36	24.862	
2,100.0	2,051.3	2,089.4	2,071.9	7.9	5.5	149.36	-113.1	-171.9	248.0	238.1	9.96	24.913	
2,200.0	2,147.5	2,188.2	2,169.3	8.4	5.8	149.25	-122.6	-185.2	263.4	252.9	10.56	24.954	
2,300.0	2,243.7	2,287.0	2,266.7	8.9	6.1	149.16	-132.1	-198.5	278.8	267.7	11.16	24.988	
2,400.0	2,340.0	2,385.8	2,364.2	9.4	6.4	149.08	-141.7	-211.8	294.2	282.5	11.76	25.016	
2,500.0	2,436.2	2,484.6	2,461.6	9.9	6.8	149.00	-151.2	-225.0	309.6	297.2	12.37	25.038	
2,600.0	2,532.4	2,583.4	2,559.1	10.4	7.1	148.94	-160.8	-238.3	325.0	312.0	12.97	25.057	
2,700.0	2,628.7	2,682.2	2,656.5	10.9	7.4	148.88	-170.3	-251.6	340.4	326.8	13.58	25.073	
2,800.0	2,724.9	2,781.1	2,754.0	11.5	7.8	148.82	-179.9	-264.9	355.8	341.6	14.18	25.087	
2,900.0	2,821.1	2,879.9	2,851.4	12.0	8.1	148.77	-189.4	-278.2	371.2	356.4	14.79	25.098	
3,000.0	2,917.4	2,978.7	2,948.8	12.5	8.4	148.72	-198.9	-291.5	386.6	371.2	15.40	25.107	
3,100.0	3,013.6	3,077.5	3,046.3	13.0	8.8	148.68	-208.5	-304.8	402.0	386.0	16.01	25.115	
3,200.0	3,109.8	3,176.3	3,143.7	13.5	9.1	148.64	-218.0	-318.0	417.4	400.8	16.61	25.122	
3,300.0	3,206.1	3,275.1	3,241.2	14.0	9.4	148.60	-227.6	-331.3	432.8	415.6	17.22	25.128	
3,400.0	3,302.3	3,373.9	3,338.6	14.5	9.8	148.57	-237.1	-344.6	448.2	430.3	17.83	25.133	
3,500.0	3,398.5	3,472.7	3,436.1	15.0	10.1	148.53	-246.7	-357.9	463.6	445.1	18.44	25.137	
3,600.0	3,494.8	3,571.5	3,533.5	15.5	10.4	148.50	-256.2	-371.2	479.0	459.9	19.05	25.140	
3,700.0	3,591.0	3,670.3	3,631.0	16.0	10.8	148.47	-265.7	-384.5	494.4	474.7	19.66	25.143	
3,800.0	3,687.2	3,769.1	3,728.4	16.5	11.1	148.45	-275.3	-397.8	509.8	489.5	20.27	25.146	
3,900.0	3,783.5	3,867.9	3,825.8	17.0	11.4	148.42	-284.8	-411.1	525.2	504.3	20.88	25.148	
4,000.0	3,879.7	3,966.7	3,923.3	17.5	11.8	148.40	-294.4	-424.3	540.6	519.1	21.49	25.150	
4,100.0	3,975.9	4,065.5	4,020.7	18.0	12.1	148.38	-303.9	-437.6	556.0	533.8	22.10	25.152	
4,200.0	4,072.2	4,164.4	4,118.2	18.6	12.4	148.35	-313.4	-450.9	571.3	548.6	22.72	25.153	
4,300.0	4,168.4	4,263.2	4,215.6	19.1	12.8	148.33	-323.0	-464.2	586.7	563.4	23.33	25.154	
4,400.0	4,264.6	4,362.0	4,313.1	19.6	13.1	148.31	-332.5	-477.5	602.1	578.2	23.94	25.155	
4,500.0	4,360.9	4,460.8	4,410.5	20.1	13.5	148.30	-342.1	-490.8	617.5	593.0	24.55	25.155	
4,600.0	4,457.1	4,559.6	4,507.9	20.6	13.8	148.28	-351.6	-504.1	632.9	607.8	25.16	25.156	
4,700.0	4,553.3	4,658.4	4,605.4	21.1	14.1	148.26	-361.2	-517.3	648.3	622.6	25.77	25.156	
4,800.0	4,649.6	4,757.2	4,702.8	21.6	14.5	148.25	-370.7	-530.6	663.7	637.4	26.38	25.157	
4,900.0	4,745.8	4,856.0	4,800.3	22.1	14.8	148.23	-380.2	-543.9	679.1	652.1	27.00	25.157	
5,000.0	4,842.0	4,954.8	4,897.7	22.6	15.1	148.22	-389.8	-557.2	694.5	666.9	27.61	25.157	
5,100.0	4,938.3	5,053.6	4,995.2	23.1	15.5	148.20	-399.3	-570.5	709.9	681.7	28.22	25.157	

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 OM07D 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:	OM07D 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	5,034.5	5,152.4	5,092.6	23.6	15.8	148.19	-408.9	-583.8	725.3	696.5	28.83	25.157	
5,300.0	5,130.7	5,251.2	5,190.1	24.1	16.1	148.18	-418.4	-597.1	740.7	711.3	29.44	25.157	
5,400.0	5,227.0	5,350.0	5,287.5	24.6	16.5	148.17	-428.0	-610.4	756.1	726.1	30.06	25.157	
5,500.0	5,323.2	5,448.9	5,384.9	25.2	16.8	148.16	-437.5	-623.6	771.5	740.9	30.67	25.156	
5,600.0	5,419.4	5,547.7	5,482.4	25.7	17.1	148.14	-447.0	-636.9	786.9	755.6	31.28	25.156	
5,700.0	5,515.7	5,646.5	5,579.8	26.2	17.5	148.13	-456.6	-650.2	802.3	770.4	31.89	25.156	
5,800.0	5,611.9	5,745.3	5,677.3	26.7	17.8	148.12	-466.1	-663.5	817.7	785.2	32.51	25.156	
5,900.0	5,708.2	5,844.1	5,774.7	27.2	18.1	148.11	-475.7	-676.8	833.1	800.0	33.12	25.155	
6,000.0	5,804.4	5,942.9	5,872.2	27.7	18.5	148.10	-485.2	-690.1	848.5	814.8	33.73	25.155	
6,100.0	5,900.6	6,041.7	5,969.6	28.2	18.8	148.09	-494.8	-703.4	863.9	829.6	34.34	25.155	
6,200.0	5,996.9	6,140.5	6,067.0	28.7	19.2	148.09	-504.3	-716.6	879.3	844.4	34.96	25.154	
6,300.0	6,093.1	6,239.3	6,164.5	29.2	19.5	148.09	-513.8	-729.9	894.7	859.1	35.57	25.153	
6,400.0	6,189.9	6,338.4	6,262.2	29.7	19.8	148.16	-523.4	-743.3	908.3	872.1	36.19	25.097	
6,500.0	6,287.5	6,437.7	6,360.2	30.1	20.2	148.08	-533.0	-756.6	919.0	882.1	36.84	24.945	
6,600.0	6,385.8	6,530.4	6,451.6	30.4	20.5	147.90	-541.7	-768.8	926.9	889.4	37.45	24.747	
6,700.0	6,484.7	6,616.8	6,537.3	30.7	20.7	147.75	-548.5	-778.3	933.1	895.2	37.97	24.579	
6,800.0	6,584.0	6,700.0	6,620.0	30.9	20.9	147.64	-553.7	-785.4	937.9	899.5	38.39	24.433	
6,900.0	6,683.7	6,790.1	6,709.8	31.1	21.0	147.54	-557.6	-790.9	941.1	902.4	38.74	24.296	
7,000.0	6,783.6	6,876.9	6,796.5	31.2	21.2	147.48	-559.9	-794.1	942.8	903.8	38.99	24.179	
7,100.0	6,883.6	6,964.0	6,883.6	31.2	21.3	111.92	-560.6	-795.1	943.0	903.8	39.19	24.061	
7,200.0	6,983.6	7,065.6	6,985.2	31.3	21.4	111.93	-560.7	-795.3	943.0	903.6	39.43	23.920	
7,300.0	7,083.6	7,167.1	7,086.7	31.4	21.5	111.93	-561.1	-795.9	943.1	903.4	39.67	23.772	
7,400.0	7,183.6	7,268.7	7,188.3	31.5	21.6	111.94	-561.6	-796.9	943.1	903.2	39.93	23.618	
7,500.0	7,283.6	7,369.0	7,288.6	31.6	21.7	111.94	-562.4	-798.1	943.1	902.9	40.19	23.465	
7,600.0	7,383.6	7,469.0	7,388.6	31.7	21.8	111.94	-563.1	-799.3	943.1	902.7	40.45	23.314	
7,700.0	7,483.5	7,569.0	7,488.6	31.8	22.0	111.94	-563.8	-800.6	943.1	902.4	40.72	23.164	
7,800.0	7,583.5	7,669.0	7,588.6	31.8	22.1	111.94	-564.5	-801.8	943.1	902.1	40.98	23.014	
7,900.0	7,683.5	7,769.0	7,688.6	31.9	22.2	111.94	-565.2	-803.1	943.1	901.9	41.24	22.866	
8,000.0	7,783.5	7,869.0	7,788.5	32.0	22.3	111.94	-565.9	-804.3	943.1	901.6	41.51	22.720	
8,100.0	7,883.5	7,969.0	7,888.5	32.1	22.5	111.94	-566.7	-805.6	943.1	901.3	41.78	22.574	
8,200.0	7,983.5	8,069.0	7,988.5	32.2	22.6	111.94	-567.4	-806.8	943.1	901.1	42.05	22.430	
8,300.0	8,083.5	8,169.0	8,088.5	32.3	22.7	111.94	-568.1	-808.1	943.1	900.8	42.32	22.287	
8,400.0	8,183.5	8,269.0	8,188.5	32.4	22.9	111.94	-568.8	-809.3	943.1	900.5	42.59	22.145	
8,500.0	8,283.5	8,369.0	8,288.5	32.5	23.0	111.94	-569.5	-810.6	943.1	900.3	42.86	22.004	
8,600.0	8,383.5	8,469.0	8,388.5	32.6	23.1	111.93	-570.2	-811.8	943.1	900.0	43.14	21.864	
8,700.0	8,483.4	8,569.0	8,488.5	32.7	23.2	111.93	-571.0	-813.0	943.1	899.7	43.41	21.726	
8,800.0	8,583.4	8,669.0	8,588.5	32.8	23.4	111.93	-571.7	-814.3	943.1	899.5	43.69	21.589	
8,900.0	8,683.4	8,769.0	8,688.4	32.9	23.5	111.93	-572.4	-815.5	943.1	899.2	43.96	21.453	
9,000.0	8,783.4	8,869.0	8,788.4	33.0	23.6	111.93	-573.1	-816.8	943.1	898.9	44.24	21.318	
9,100.0	8,883.4	8,969.0	8,888.4	33.1	23.8	111.93	-573.8	-818.0	943.1	898.6	44.52	21.184	
9,200.0	8,983.4	9,069.0	8,988.4	33.2	23.9	111.93	-574.5	-819.3	943.2	898.3	44.80	21.052	
9,300.0	9,083.4	9,169.0	9,088.4	33.3	24.0	111.93	-575.3	-820.5	943.2	898.1	45.08	20.920	
9,400.0	9,183.4	9,269.0	9,188.4	33.4	24.2	111.93	-576.0	-821.8	943.2	897.8	45.37	20.790	
9,500.0	9,283.4	9,369.0	9,288.4	33.5	24.3	111.93	-576.7	-823.0	943.2	897.5	45.65	20.661	
9,600.0	9,383.3	9,469.0	9,388.4	33.6	24.4	111.93	-577.4	-824.3	943.2	897.2	45.93	20.534	
9,700.0	9,483.3	9,569.0	9,488.4	33.7	24.6	111.93	-578.1	-825.5	943.2	896.9	46.22	20.407	
9,800.0	9,583.3	9,669.0	9,588.4	33.8	24.7	111.93	-578.8	-826.7	943.2	896.7	46.50	20.282	
9,900.0	9,683.3	9,769.0	9,688.3	33.9	24.9	111.93	-579.6	-828.0	943.2	896.4	46.79	20.157	
10,000.0	9,783.3	9,869.0	9,788.3	34.0	25.0	111.93	-580.3	-829.2	943.2	896.1	47.08	20.034	
10,027.7	9,811.0	9,896.7	9,816.0	34.1	25.0	111.93	-580.5	-829.6	943.2	896.0	47.16	20.000	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D 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	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	CC
300.0	300.0	300.0	300.0	0.5	0.5	-104.46	8.7	5.1	10.4	9.4	1.00	10.422	ES
400.0	399.9	399.9	399.9	0.7	0.7	-160.91	8.7	5.1	13.3	12.0	1.35	9.897	SF
500.0	499.7	500.2	500.1	0.9	0.8	175.24	7.5	3.8	18.5	16.8	1.69	10.924	
600.0	599.2	600.5	600.3	1.1	1.0	162.20	3.9	0.0	24.4	22.4	2.05	11.919	
700.0	698.4	700.8	700.2	1.4	1.3	153.53	-2.1	-6.4	31.1	28.7	2.43	12.775	
800.0	797.0	801.1	799.8	1.7	1.5	147.13	-10.5	-15.4	38.6	35.7	2.88	13.397	
900.0	895.1	901.5	898.9	2.1	1.8	142.10	-21.2	-26.8	46.9	43.5	3.42	13.741	
1,000.0	992.4	1,001.9	997.4	2.5	2.2	138.00	-34.4	-40.8	56.1	52.0	4.06	13.830	
1,100.0	1,088.9	1,101.5	1,094.7	3.0	2.5	135.64	-49.0	-56.4	66.5	61.7	4.76	13.972	
1,200.0	1,185.2	1,200.9	1,191.8	3.4	2.9	135.14	-63.7	-72.0	77.5	72.0	5.48	14.156	
1,300.0	1,281.4	1,300.2	1,288.9	3.9	3.3	134.76	-78.3	-87.6	88.5	82.3	6.21	14.259	
1,400.0	1,377.6	1,399.6	1,385.9	4.4	3.7	134.46	-93.0	-103.2	99.6	92.6	6.95	14.316	
1,500.0	1,473.9	1,499.0	1,483.0	4.9	4.1	134.22	-107.6	-118.7	110.6	102.9	7.71	14.347	
1,600.0	1,570.1	1,598.4	1,580.0	5.4	4.5	134.03	-122.3	-134.3	121.6	113.1	8.47	14.362	
1,700.0	1,666.3	1,697.8	1,677.1	5.9	4.9	133.87	-136.9	-149.9	132.6	123.4	9.23	14.367	
1,800.0	1,762.6	1,797.2	1,774.2	6.4	5.3	133.73	-151.6	-165.5	143.7	133.7	10.00	14.367	
1,900.0	1,858.8	1,896.6	1,871.2	6.9	5.7	133.61	-166.2	-181.1	154.7	143.9	10.77	14.363	
2,000.0	1,955.0	1,996.0	1,968.3	7.4	6.1	133.51	-180.9	-196.7	165.7	154.2	11.54	14.356	
2,100.0	2,051.3	2,095.4	2,065.3	7.9	6.5	133.42	-195.5	-212.3	176.8	164.4	12.32	14.349	
2,200.0	2,147.5	2,194.8	2,162.4	8.4	7.0	133.34	-210.2	-227.8	187.8	174.7	13.09	14.340	
2,300.0	2,243.7	2,294.1	2,259.5	8.9	7.4	133.27	-224.8	-243.4	198.8	184.9	13.87	14.332	
2,400.0	2,340.0	2,393.5	2,356.5	9.4	7.8	133.21	-239.5	-259.0	209.8	195.2	14.65	14.323	
2,500.0	2,436.2	2,492.9	2,453.6	9.9	8.2	133.15	-254.1	-274.6	220.9	205.4	15.43	14.314	
2,600.0	2,532.4	2,592.3	2,550.6	10.4	8.6	133.10	-268.8	-290.2	231.9	215.7	16.21	14.306	
2,700.0	2,628.7	2,691.7	2,647.7	10.9	9.0	133.06	-283.4	-305.8	242.9	225.9	16.99	14.297	
2,800.0	2,724.9	2,791.1	2,744.8	11.5	9.4	133.02	-298.1	-321.4	254.0	236.2	17.77	14.289	
2,900.0	2,821.1	2,890.5	2,841.8	12.0	9.8	132.98	-312.7	-336.9	265.0	246.4	18.56	14.282	
3,000.0	2,917.4	2,989.9	2,938.9	12.5	10.3	132.94	-327.4	-352.5	276.0	256.7	19.34	14.274	
3,100.0	3,013.6	3,089.3	3,035.9	13.0	10.7	132.91	-342.0	-368.1	287.1	266.9	20.12	14.267	
3,200.0	3,109.8	3,188.6	3,133.0	13.5	11.1	132.88	-356.7	-383.7	298.1	277.2	20.90	14.260	
3,300.0	3,206.1	3,288.0	3,230.1	14.0	11.5	132.85	-371.3	-399.3	309.1	287.4	21.69	14.254	
3,400.0	3,302.3	3,387.4	3,327.1	14.5	11.9	132.82	-386.0	-414.9	320.2	297.7	22.47	14.247	
3,500.0	3,398.5	3,486.8	3,424.2	15.0	12.3	132.80	-400.6	-430.5	331.2	307.9	23.26	14.241	
3,600.0	3,494.8	3,586.2	3,521.2	15.5	12.7	132.78	-415.3	-446.0	342.2	318.2	24.04	14.236	
3,700.0	3,591.0	3,685.6	3,618.3	16.0	13.2	132.75	-429.9	-461.6	353.3	328.4	24.83	14.230	
3,800.0	3,687.2	3,785.0	3,715.4	16.5	13.6	132.73	-444.6	-477.2	364.3	338.7	25.61	14.225	
3,900.0	3,783.5	3,884.4	3,812.4	17.0	14.0	132.71	-459.2	-492.8	375.3	348.9	26.39	14.220	
4,000.0	3,879.7	3,983.8	3,909.5	17.5	14.4	132.70	-473.9	-508.4	386.4	359.2	27.18	14.215	
4,100.0	3,975.9	4,083.2	4,006.5	18.0	14.8	132.68	-488.5	-524.0	397.4	369.4	27.97	14.211	
4,200.0	4,072.2	4,182.5	4,103.6	18.6	15.2	132.66	-503.2	-539.6	408.4	379.7	28.75	14.206	
4,300.0	4,168.4	4,281.9	4,200.7	19.1	15.6	132.65	-517.8	-555.2	419.5	389.9	29.54	14.202	
4,400.0	4,264.6	4,381.3	4,297.7	19.6	16.1	132.63	-532.5	-570.7	430.5	400.2	30.32	14.198	
4,500.0	4,360.9	4,480.7	4,394.8	20.1	16.5	132.62	-547.1	-586.3	441.5	410.4	31.11	14.194	
4,600.0	4,457.1	4,580.1	4,491.8	20.6	16.9	132.61	-561.8	-601.9	452.6	420.7	31.89	14.190	
4,700.0	4,553.3	4,679.5	4,588.9	21.1	17.3	132.59	-576.4	-617.5	463.6	430.9	32.68	14.187	
4,800.0	4,649.6	4,778.9	4,686.0	21.6	17.7	132.58	-591.1	-633.1	474.6	441.2	33.46	14.183	
4,900.0	4,745.8	4,878.3	4,783.0	22.1	18.1	132.57	-605.7	-648.7	485.7	451.4	34.25	14.180	
5,000.0	4,842.0	4,977.7	4,880.1	22.6	18.6	132.56	-620.4	-664.3	496.7	461.7	35.04	14.177	
5,100.0	4,938.3	5,077.0	4,977.1	23.1	19.0	132.55	-635.0	-679.8	507.7	471.9	35.82	14.173	

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 OM07D 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:	OM07D 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	5,034.5	5,176.4	5,074.2	23.6	19.4	132.54	-649.7	-695.4	518.8	482.2	36.61	14.170	
5,300.0	5,130.7	5,275.8	5,171.3	24.1	19.8	132.53	-664.3	-711.0	529.8	492.4	37.40	14.168	
5,400.0	5,227.0	5,375.2	5,268.3	24.6	20.2	132.52	-679.0	-726.6	540.8	502.7	38.18	14.165	
5,500.0	5,323.2	5,474.6	5,365.4	25.2	20.6	132.51	-693.6	-742.2	551.9	512.9	38.97	14.162	
5,600.0	5,419.4	5,574.0	5,462.4	25.7	21.0	132.50	-708.3	-757.8	562.9	523.1	39.75	14.159	
5,700.0	5,515.7	5,673.4	5,559.5	26.2	21.5	132.50	-722.9	-773.4	573.9	533.4	40.54	14.157	
5,800.0	5,611.9	5,772.8	5,656.6	26.7	21.9	132.49	-737.6	-788.9	585.0	543.6	41.33	14.154	
5,900.0	5,708.2	5,872.2	5,753.6	27.2	22.3	132.48	-752.2	-804.5	596.0	553.9	42.11	14.152	
6,000.0	5,804.4	5,971.5	5,850.7	27.7	22.7	132.47	-766.9	-820.1	607.0	564.1	42.90	14.150	
6,100.0	5,900.6	6,070.9	5,947.7	28.2	23.1	132.47	-781.5	-835.7	618.1	574.4	43.69	14.148	
6,200.0	5,996.9	6,170.3	6,044.8	28.7	23.5	132.46	-796.2	-851.3	629.1	584.6	44.47	14.145	
6,300.0	6,093.1	6,269.7	6,141.9	29.2	23.9	132.47	-810.8	-866.9	640.1	594.9	45.26	14.143	
6,400.0	6,189.9	6,369.2	6,239.1	29.7	24.4	132.47	-825.5	-882.5	649.7	603.7	46.05	14.108	
6,500.0	6,287.5	6,462.3	6,330.2	30.1	24.7	132.34	-838.4	-896.2	657.4	610.6	46.79	14.052	
6,600.0	6,385.8	6,554.7	6,421.2	30.4	25.0	132.23	-849.3	-907.8	663.9	616.5	47.42	14.002	
6,700.0	6,484.7	6,647.2	6,512.8	30.7	25.3	132.14	-858.1	-917.1	669.2	621.2	47.95	13.956	
6,800.0	6,584.0	6,739.7	6,604.8	30.9	25.5	132.07	-864.9	-924.4	673.2	624.8	48.38	13.914	
6,900.0	6,683.7	6,832.3	6,697.1	31.1	25.6	132.02	-869.6	-929.4	676.0	627.3	48.72	13.876	
7,000.0	6,783.6	6,924.9	6,789.7	31.2	25.7	131.98	-872.4	-932.3	677.5	628.6	48.95	13.840	
7,100.0	6,883.6	7,018.9	6,883.6	31.2	25.8	96.45	-873.1	-933.1	677.8	628.7	49.12	13.801	
7,200.0	6,983.6	7,119.3	6,984.0	31.3	25.9	96.45	-873.2	-933.3	677.8	628.5	49.31	13.747	
7,300.0	7,083.6	7,219.6	7,084.3	31.4	26.0	96.45	-873.6	-934.0	677.8	628.3	49.51	13.690	
7,400.0	7,183.6	7,319.9	7,184.6	31.5	26.1	96.45	-874.2	-935.0	677.9	628.1	49.73	13.630	
7,500.0	7,283.6	7,420.0	7,284.7	31.6	26.2	96.45	-874.9	-936.2	677.9	627.9	49.96	13.569	
7,600.0	7,383.6	7,520.0	7,384.6	31.7	26.3	96.45	-875.6	-937.5	677.9	627.7	50.18	13.508	
7,700.0	7,483.5	7,620.0	7,484.6	31.8	26.4	96.45	-876.3	-938.7	677.9	627.4	50.41	13.447	
7,800.0	7,583.5	7,720.0	7,584.6	31.8	26.5	96.45	-877.0	-940.0	677.9	627.2	50.64	13.387	
7,900.0	7,683.5	7,820.0	7,684.6	31.9	26.6	96.45	-877.8	-941.2	677.9	627.0	50.86	13.327	
8,000.0	7,783.5	7,920.0	7,784.6	32.0	26.8	96.45	-878.5	-942.5	677.9	626.8	51.09	13.267	
8,100.0	7,883.5	8,020.0	7,884.6	32.1	26.9	96.45	-879.2	-943.7	677.9	626.5	51.33	13.207	
8,200.0	7,983.5	8,120.0	7,984.6	32.2	27.0	96.45	-879.9	-944.9	677.9	626.3	51.56	13.147	
8,300.0	8,083.5	8,220.0	8,084.6	32.3	27.1	96.45	-880.6	-946.2	677.9	626.1	51.79	13.087	
8,400.0	8,183.5	8,320.0	8,184.6	32.4	27.2	96.45	-881.4	-947.4	677.9	625.8	52.03	13.028	
8,500.0	8,283.5	8,420.0	8,284.5	32.5	27.3	96.45	-882.1	-948.7	677.9	625.6	52.27	12.969	
8,600.0	8,383.5	8,520.0	8,384.5	32.6	27.4	96.45	-882.8	-949.9	677.9	625.4	52.51	12.910	
8,700.0	8,483.4	8,620.0	8,484.5	32.7	27.5	96.45	-883.5	-951.2	677.9	625.1	52.75	12.851	
8,800.0	8,583.4	8,720.0	8,584.5	32.8	27.7	96.45	-884.2	-952.4	677.9	624.9	52.99	12.793	
8,900.0	8,683.4	8,820.0	8,684.5	32.9	27.8	96.45	-885.0	-953.7	677.9	624.6	53.23	12.735	
9,000.0	8,783.4	8,920.0	8,784.5	33.0	27.9	96.45	-885.7	-954.9	677.9	624.4	53.47	12.677	
9,100.0	8,883.4	9,020.0	8,884.5	33.1	28.0	96.45	-886.4	-956.1	677.9	624.1	53.72	12.619	
9,200.0	8,983.4	9,120.0	8,984.5	33.2	28.1	96.45	-887.1	-957.4	677.9	623.9	53.96	12.562	
9,300.0	9,083.4	9,220.0	9,084.5	33.3	28.2	96.45	-887.8	-958.6	677.9	623.7	54.21	12.504	
9,400.0	9,183.4	9,320.0	9,184.5	33.4	28.4	96.45	-888.6	-959.9	677.9	623.4	54.46	12.447	
9,500.0	9,283.4	9,420.0	9,284.4	33.5	28.5	96.45	-889.3	-961.1	677.9	623.2	54.71	12.391	
9,600.0	9,383.3	9,520.0	9,384.4	33.6	28.6	96.45	-890.0	-962.4	677.9	622.9	54.96	12.334	
9,700.0	9,483.3	9,620.0	9,484.4	33.7	28.7	96.45	-890.7	-963.6	677.9	622.7	55.21	12.278	
9,800.0	9,583.3	9,720.0	9,584.4	33.8	28.9	96.45	-891.4	-964.9	677.9	622.4	55.46	12.222	
9,900.0	9,683.3	9,820.0	9,684.4	33.9	29.0	96.45	-892.1	-966.1	677.9	622.2	55.72	12.166	
10,000.0	9,783.3	9,920.0	9,784.4	34.0	29.1	96.45	-892.9	-967.3	677.9	621.9	55.97	12.111	
10,027.7	9,811.0	9,947.7	9,812.1	34.1	29.1	96.45	-893.1	-967.7	677.9	621.8	56.04	12.096	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D 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	-150.22	-8.4	-4.8	9.7				
100.0	100.0	100.0	100.0	0.1	0.1	-150.22	-8.4	-4.8	9.7	9.4	0.30	32.548	
200.0	200.0	200.0	200.0	0.3	0.3	-150.22	-8.4	-4.8	9.7	9.0	0.65	14.954	
271.0	271.0	271.0	271.0	0.4	0.4	90.00	-8.4	-4.8	9.6	8.7	0.90	10.735	CC
300.0	300.0	300.0	300.0	0.5	0.5	95.14	-8.4	-4.8	9.7	8.7	1.00	9.671	ES
400.0	399.9	399.6	399.5	0.7	0.7	72.38	-9.7	-5.9	10.7	9.3	1.36	7.850	
500.0	499.7	499.1	499.0	0.9	0.9	72.14	-13.7	-9.3	13.1	11.3	1.74	7.515	
600.0	599.2	598.6	598.1	1.1	1.1	76.61	-20.2	-14.9	16.7	14.5	2.17	7.682	
700.0	698.4	698.1	696.8	1.4	1.3	80.70	-29.4	-22.7	21.2	18.6	2.68	7.919	
800.0	797.0	797.6	795.1	1.7	1.6	83.78	-41.3	-32.7	26.5	23.3	3.29	8.078	
900.0	895.1	896.9	892.6	2.1	2.0	86.04	-55.6	-44.9	32.5	28.5	4.00	8.133	
1,000.0	992.4	996.3	989.5	2.5	2.4	87.71	-72.6	-59.3	39.1	34.3	4.82	8.102	
1,100.0	1,088.9	1,095.8	1,085.8	3.0	2.9	89.68	-91.8	-75.5	46.1	40.3	5.73	8.035	
1,200.0	1,185.2	1,195.5	1,182.1	3.4	3.3	92.48	-111.3	-92.1	53.1	46.5	6.67	7.967	
1,300.0	1,281.4	1,295.3	1,278.5	3.9	3.8	94.61	-130.8	-108.6	60.3	52.7	7.61	7.919	
1,400.0	1,377.6	1,395.0	1,374.9	4.4	4.2	96.29	-150.3	-125.1	67.5	59.0	8.57	7.883	
1,500.0	1,473.9	1,494.7	1,471.3	4.9	4.7	97.64	-169.8	-141.6	74.8	65.3	9.52	7.857	
1,600.0	1,570.1	1,594.4	1,567.7	5.4	5.2	98.76	-189.3	-158.2	82.1	71.6	10.48	7.837	
1,700.0	1,666.3	1,694.1	1,664.1	5.9	5.7	99.69	-208.8	-174.7	89.5	78.0	11.44	7.821	
1,800.0	1,762.6	1,793.9	1,760.5	6.4	6.1	100.48	-228.3	-191.2	96.8	84.4	12.40	7.809	
1,900.0	1,858.8	1,893.6	1,856.9	6.9	6.6	101.16	-247.8	-207.8	104.2	90.8	13.36	7.799	
2,000.0	1,955.0	1,993.3	1,953.3	7.4	7.1	101.74	-267.3	-224.3	111.6	97.2	14.32	7.791	
2,100.0	2,051.3	2,093.0	2,049.6	7.9	7.6	102.26	-286.7	-240.8	119.0	103.7	15.28	7.785	
2,200.0	2,147.5	2,192.8	2,146.0	8.4	8.1	102.71	-306.2	-257.4	126.4	110.1	16.24	7.779	
2,300.0	2,243.7	2,292.5	2,242.4	8.9	8.5	103.12	-325.7	-273.9	133.8	116.6	17.21	7.775	
2,400.0	2,340.0	2,392.2	2,338.8	9.4	9.0	103.48	-345.2	-290.4	141.2	123.0	18.17	7.771	
2,500.0	2,436.2	2,491.9	2,435.2	9.9	9.5	103.81	-364.7	-307.0	148.6	129.5	19.13	7.768	
2,600.0	2,532.4	2,591.6	2,531.6	10.4	10.0	104.10	-384.2	-323.5	156.0	135.9	20.09	7.766	
2,700.0	2,628.7	2,691.4	2,628.0	10.9	10.5	104.37	-403.7	-340.0	163.5	142.4	21.06	7.763	
2,800.0	2,724.9	2,791.1	2,724.4	11.5	11.0	104.62	-423.2	-356.6	170.9	148.9	22.02	7.761	
2,900.0	2,821.1	2,890.8	2,820.8	12.0	11.4	104.84	-442.7	-373.1	178.3	155.4	22.98	7.760	
3,000.0	2,917.4	2,990.5	2,917.1	12.5	11.9	105.05	-462.2	-389.6	185.8	161.8	23.94	7.758	
3,100.0	3,013.6	3,090.2	3,013.5	13.0	12.4	105.24	-481.7	-406.2	193.2	168.3	24.91	7.757	
3,200.0	3,109.8	3,190.0	3,109.9	13.5	12.9	105.41	-501.2	-422.7	200.7	174.8	25.87	7.756	
3,300.0	3,206.1	3,289.7	3,206.3	14.0	13.4	105.58	-520.7	-439.2	208.1	181.3	26.83	7.755	
3,400.0	3,302.3	3,389.4	3,302.7	14.5	13.9	105.73	-540.2	-455.8	215.5	187.7	27.80	7.754	
3,500.0	3,398.5	3,489.1	3,399.1	15.0	14.3	105.87	-559.7	-472.3	223.0	194.2	28.76	7.753	
3,600.0	3,494.8	3,588.8	3,495.5	15.5	14.8	106.00	-579.2	-488.8	230.4	200.7	29.72	7.753	
3,700.0	3,591.0	3,688.6	3,591.9	16.0	15.3	106.13	-598.7	-505.4	237.9	207.2	30.69	7.752	
3,800.0	3,687.2	3,788.3	3,688.3	16.5	15.8	106.25	-618.2	-521.9	245.3	213.7	31.65	7.751	
3,900.0	3,783.5	3,888.0	3,784.6	17.0	16.3	106.36	-637.7	-538.4	252.8	220.2	32.61	7.751	
4,000.0	3,879.7	3,987.7	3,881.0	17.5	16.8	106.46	-657.2	-554.9	260.2	226.7	33.58	7.750	
4,100.0	3,975.9	4,087.4	3,977.4	18.0	17.2	106.56	-676.7	-571.5	267.7	233.2	34.54	7.750	
4,200.0	4,072.2	4,187.2	4,073.8	18.6	17.7	106.65	-696.2	-588.0	275.1	239.6	35.50	7.750	
4,300.0	4,168.4	4,286.9	4,170.2	19.1	18.2	106.74	-715.7	-604.5	282.6	246.1	36.47	7.749	
4,400.0	4,264.6	4,386.6	4,266.6	19.6	18.7	106.82	-735.2	-621.1	290.1	252.6	37.43	7.749	
4,500.0	4,360.9	4,486.3	4,363.0	20.1	19.2	106.90	-754.7	-637.6	297.5	259.1	38.39	7.749	
4,600.0	4,457.1	4,586.1	4,459.4	20.6	19.7	106.98	-774.2	-654.1	305.0	265.6	39.36	7.749	
4,700.0	4,553.3	4,685.8	4,555.8	21.1	20.1	107.05	-793.6	-670.7	312.4	272.1	40.32	7.748	
4,800.0	4,649.6	4,785.5	4,652.1	21.6	20.6	107.12	-813.1	-687.2	319.9	278.6	41.28	7.748	
4,900.0	4,745.8	4,885.2	4,748.5	22.1	21.1	107.18	-832.6	-703.7	327.3	285.1	42.25	7.748	
5,000.0	4,842.0	4,984.9	4,844.9	22.6	21.6	107.25	-852.1	-720.3	334.8	291.6	43.21	7.748	

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 OM07D 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:	OM07D 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
5,100.0	4,938.3	5,084.7	4,941.3	23.1	22.1	107.31	-871.6	-736.8	342.3	298.1	44.17	7.748	
5,200.0	5,034.5	5,184.4	5,037.7	23.6	22.6	107.36	-891.1	-753.3	349.7	304.6	45.14	7.748	
5,300.0	5,130.7	5,284.1	5,134.1	24.1	23.0	107.42	-910.6	-769.9	357.2	311.1	46.10	7.748	
5,400.0	5,227.0	5,383.8	5,230.5	24.6	23.5	107.47	-930.1	-786.4	364.6	317.6	47.06	7.748	
5,500.0	5,323.2	5,483.5	5,326.9	25.2	24.0	107.52	-949.6	-802.9	372.1	324.1	48.03	7.747	
5,600.0	5,419.4	5,583.3	5,423.3	25.7	24.5	107.57	-969.1	-819.5	379.5	330.6	48.99	7.747	
5,700.0	5,515.7	5,683.0	5,519.7	26.2	25.0	107.62	-988.6	-836.0	387.0	337.1	49.95	7.747	
5,800.0	5,611.9	5,782.7	5,616.0	26.7	25.5	107.66	-1,008.1	-852.5	394.5	343.6	50.92	7.747	
5,900.0	5,708.2	5,882.4	5,712.4	27.2	26.0	107.70	-1,027.6	-869.1	401.9	350.0	51.88	7.747	
6,000.0	5,804.4	5,982.1	5,808.8	27.7	26.4	107.75	-1,047.1	-885.6	409.4	356.5	52.84	7.747	
6,100.0	5,900.6	6,081.9	5,905.2	28.2	26.9	107.79	-1,066.6	-902.1	416.9	363.0	53.81	7.747	
6,200.0	5,996.9	6,181.6	6,001.6	28.7	27.4	107.82	-1,086.1	-918.6	424.3	369.5	54.77	7.747	
6,300.0	6,093.1	6,281.3	6,098.0	29.2	27.9	107.87	-1,105.6	-935.2	431.8	376.0	55.73	7.747	
6,400.0	6,189.9	6,380.6	6,194.2	29.7	28.3	107.90	-1,124.3	-951.0	438.6	382.0	56.62	7.747	
6,500.0	6,287.5	6,479.8	6,291.1	30.1	28.7	107.92	-1,140.5	-964.8	444.5	387.1	57.39	7.746	
6,600.0	6,385.8	6,579.0	6,388.7	30.4	29.0	107.94	-1,154.1	-976.3	449.5	391.5	58.05	7.744	
6,700.0	6,484.7	6,678.3	6,486.9	30.7	29.3	107.96	-1,165.2	-985.7	453.6	395.0	58.60	7.740	
6,800.0	6,584.0	6,777.7	6,585.6	30.9	29.5	107.98	-1,173.6	-992.9	456.7	397.7	59.04	7.735	
6,900.0	6,683.7	6,877.1	6,684.7	31.1	29.7	108.00	-1,179.5	-997.8	458.9	399.5	59.37	7.729	
7,000.0	6,783.6	6,976.4	6,784.0	31.2	29.8	108.02	-1,182.7	-1,000.6	460.1	400.5	59.59	7.721	
7,100.0	6,883.6	7,075.9	6,883.4	31.2	29.9	72.52	-1,183.4	-1,001.2	460.4	400.6	59.73	7.707	
7,200.0	6,983.6	7,175.3	6,982.8	31.3	30.0	72.52	-1,183.6	-1,001.4	460.4	400.5	59.89	7.686	
7,300.0	7,083.6	7,274.7	7,082.2	31.4	30.1	72.51	-1,183.9	-1,002.1	460.4	400.3	60.07	7.664	
7,400.0	7,183.6	7,374.1	7,181.6	31.5	30.1	72.51	-1,184.5	-1,003.1	460.4	400.1	60.26	7.640	
7,500.0	7,283.6	7,474.0	7,281.6	31.6	30.2	72.51	-1,185.3	-1,004.4	460.4	399.9	60.45	7.616	
7,600.0	7,383.6	7,574.0	7,381.6	31.7	30.3	72.51	-1,186.0	-1,005.6	460.4	399.7	60.65	7.591	
7,700.0	7,483.5	7,674.0	7,481.6	31.8	30.4	72.51	-1,186.7	-1,006.9	460.4	399.5	60.84	7.567	
7,800.0	7,583.5	7,774.0	7,581.5	31.8	30.5	72.51	-1,187.4	-1,008.1	460.4	399.3	61.04	7.543	
7,900.0	7,683.5	7,874.0	7,681.5	31.9	30.6	72.51	-1,188.1	-1,009.4	460.4	399.1	61.24	7.518	
8,000.0	7,783.5	7,974.0	7,781.5	32.0	30.7	72.51	-1,188.9	-1,010.6	460.4	398.9	61.44	7.494	
8,100.0	7,883.5	8,074.0	7,881.5	32.1	30.8	72.51	-1,189.6	-1,011.8	460.4	398.7	61.64	7.469	
8,200.0	7,983.5	8,174.0	7,981.5	32.2	30.9	72.51	-1,190.3	-1,013.1	460.4	398.5	61.84	7.445	
8,300.0	8,083.5	8,274.0	8,081.5	32.3	31.0	72.51	-1,191.0	-1,014.3	460.4	398.3	62.04	7.420	
8,400.0	8,183.5	8,374.0	8,181.5	32.4	31.1	72.51	-1,191.7	-1,015.6	460.4	398.1	62.25	7.396	
8,500.0	8,283.5	8,474.0	8,281.5	32.5	31.2	72.51	-1,192.5	-1,016.8	460.4	397.9	62.46	7.371	
8,600.0	8,383.5	8,574.0	8,381.5	32.6	31.3	72.51	-1,193.2	-1,018.1	460.4	397.7	62.66	7.347	
8,700.0	8,483.4	8,674.0	8,481.5	32.7	31.4	72.51	-1,193.9	-1,019.3	460.4	397.5	62.87	7.323	
8,800.0	8,583.4	8,774.0	8,581.4	32.8	31.6	72.51	-1,194.6	-1,020.5	460.4	397.3	63.08	7.298	
8,900.0	8,683.4	8,874.0	8,681.4	32.9	31.7	72.51	-1,195.3	-1,021.8	460.4	397.1	63.29	7.274	
9,000.0	8,783.4	8,974.0	8,781.4	33.0	31.8	72.51	-1,196.1	-1,023.0	460.4	396.9	63.51	7.249	
9,100.0	8,883.4	9,074.0	8,881.4	33.1	31.9	72.51	-1,196.8	-1,024.3	460.4	396.7	63.72	7.225	
9,200.0	8,983.4	9,174.0	8,981.4	33.2	32.0	72.51	-1,197.5	-1,025.5	460.4	396.4	63.94	7.201	
9,300.0	9,083.4	9,274.0	9,081.4	33.3	32.1	72.51	-1,198.2	-1,026.7	460.4	396.2	64.15	7.176	
9,400.0	9,183.4	9,374.0	9,181.4	33.4	32.2	72.51	-1,198.9	-1,028.0	460.4	396.0	64.37	7.152	
9,500.0	9,283.4	9,474.0	9,281.4	33.5	32.3	72.51	-1,199.7	-1,029.2	460.4	395.8	64.59	7.128	
9,600.0	9,383.3	9,574.0	9,381.4	33.6	32.4	72.51	-1,200.4	-1,030.5	460.4	395.6	64.81	7.104	
9,700.0	9,483.3	9,674.0	9,481.4	33.7	32.5	72.51	-1,201.1	-1,031.7	460.4	395.3	65.03	7.079	
9,800.0	9,583.3	9,774.0	9,581.3	33.8	32.6	72.51	-1,201.8	-1,033.0	460.4	395.1	65.25	7.055	
9,900.0	9,683.3	9,874.0	9,681.3	33.9	32.7	72.51	-1,202.5	-1,034.2	460.4	394.9	65.48	7.031	
10,000.0	9,783.3	9,974.0	9,781.3	34.0	32.9	72.51	-1,203.2	-1,035.4	460.4	394.7	65.70	7.007	
10,022.3	9,805.6	9,996.4	9,803.7	34.1	32.9	72.51	-1,203.4	-1,035.7	460.4	394.6	65.75	7.002	
10,027.7	9,811.0	9,998.7	9,806.0	34.1	32.9	72.51	-1,203.4	-1,035.7	460.4	394.6	65.76	7.001	SF

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 OM07D 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:	OM07D 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

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

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

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	29.46	35.0	19.7	40.2				
100.0	100.0	100.0	100.0	0.1	0.1	29.46	35.0	19.7	40.2	39.9	0.30	135.349	
200.0	200.0	200.0	200.0	0.3	0.3	29.46	35.0	19.7	40.2	39.5	0.65	62.187	CC
300.0	300.0	300.0	300.0	0.5	0.5	-98.00	35.0	19.7	40.4	39.4	1.00	40.428	ES
400.0	399.9	399.9	399.9	0.7	0.7	-145.70	35.0	19.7	42.7	41.4	1.35	31.600	
500.0	499.7	499.7	499.7	0.9	0.8	-166.17	35.0	19.7	48.7	47.0	1.70	28.639	
600.0	599.2	599.2	599.2	1.1	1.0	-175.50	35.0	19.7	58.2	56.1	2.04	28.456	
700.0	698.4	700.3	700.3	1.4	1.2	-179.31	33.3	20.3	69.7	67.3	2.39	29.156	
800.0	797.0	801.6	801.5	1.7	1.4	-179.55	28.3	22.1	81.8	79.1	2.74	29.865	
900.0	895.1	903.0	902.4	2.1	1.6	-177.78	19.8	25.0	94.9	91.8	3.11	30.569	
1,000.0	992.4	1,004.2	1,002.8	2.5	1.8	-174.88	8.1	29.0	109.4	105.9	3.50	31.208	
1,100.0	1,088.9	1,105.1	1,102.5	3.0	2.1	-171.17	-7.0	34.3	125.4	121.4	3.97	31.611	
1,200.0	1,185.2	1,203.5	1,199.3	3.4	2.4	-167.22	-23.4	39.9	141.9	137.4	4.49	31.603	
1,300.0	1,281.4	1,301.7	1,296.0	3.9	2.7	-164.11	-39.8	45.6	159.0	153.9	5.05	31.465	
1,400.0	1,377.6	1,399.9	1,392.6	4.4	3.0	-161.60	-56.2	51.3	176.4	170.7	5.64	31.261	
1,500.0	1,473.9	1,498.1	1,489.3	4.9	3.4	-159.54	-72.6	56.9	194.0	187.8	6.25	31.032	
1,600.0	1,570.1	1,596.3	1,585.9	5.4	3.7	-157.82	-89.0	62.6	211.9	205.1	6.88	30.801	
1,700.0	1,666.3	1,694.5	1,682.6	5.9	4.0	-156.38	-105.4	68.3	230.0	222.5	7.52	30.580	
1,800.0	1,762.6	1,792.7	1,779.3	6.4	4.4	-155.14	-121.8	74.0	248.1	240.0	8.17	30.373	
1,900.0	1,858.8	1,890.9	1,875.9	6.9	4.7	-154.07	-138.2	79.6	266.4	257.6	8.83	30.183	
2,000.0	1,955.0	1,989.1	1,972.6	7.4	5.0	-153.14	-154.6	85.3	284.7	275.3	9.49	30.009	
2,100.0	2,051.3	2,087.3	2,069.2	7.9	5.4	-152.32	-171.0	91.0	303.1	293.0	10.16	29.850	
2,200.0	2,147.5	2,185.5	2,165.9	8.4	5.7	-151.60	-187.4	96.6	321.6	310.8	10.83	29.705	
2,300.0	2,243.7	2,283.7	2,262.6	8.9	6.0	-150.95	-203.9	102.3	340.1	328.6	11.50	29.574	
2,400.0	2,340.0	2,381.9	2,359.2	9.4	6.4	-150.37	-220.3	108.0	358.6	346.5	12.18	29.453	
2,500.0	2,436.2	2,480.1	2,455.9	9.9	6.7	-149.85	-236.7	113.6	377.2	364.4	12.86	29.343	
2,600.0	2,532.4	2,578.3	2,552.5	10.4	7.1	-149.38	-253.1	119.3	395.8	382.3	13.54	29.242	
2,700.0	2,628.7	2,676.5	2,649.2	10.9	7.4	-148.95	-269.5	125.0	414.4	400.2	14.22	29.150	
2,800.0	2,724.9	2,774.7	2,745.9	11.5	7.8	-148.55	-285.9	130.6	433.1	418.2	14.90	29.064	
2,900.0	2,821.1	2,872.9	2,842.5	12.0	8.1	-148.19	-302.3	136.3	451.7	436.1	15.58	28.986	
3,000.0	2,917.4	2,971.1	2,939.2	12.5	8.5	-147.86	-318.7	142.0	470.4	454.1	16.27	28.913	
3,100.0	3,013.6	3,069.4	3,035.8	13.0	8.8	-147.55	-335.1	147.7	489.1	472.1	16.96	28.845	
3,200.0	3,109.8	3,167.6	3,132.5	13.5	9.1	-147.27	-351.5	153.3	507.8	490.2	17.64	28.782	
3,300.0	3,206.1	3,265.8	3,229.2	14.0	9.5	-147.00	-367.9	159.0	526.5	508.2	18.33	28.724	
3,400.0	3,302.3	3,364.0	3,325.8	14.5	9.8	-146.75	-384.3	164.7	545.2	526.2	19.02	28.669	
3,500.0	3,398.5	3,462.2	3,422.5	15.0	10.2	-146.52	-400.7	170.3	564.0	544.3	19.71	28.618	
3,600.0	3,494.8	3,560.4	3,519.1	15.5	10.5	-146.31	-417.1	176.0	582.7	562.3	20.40	28.570	
3,700.0	3,591.0	3,658.6	3,615.8	16.0	10.9	-146.11	-433.5	181.7	601.5	580.4	21.09	28.525	
3,800.0	3,687.2	3,756.8	3,712.4	16.5	11.2	-145.92	-449.9	187.3	620.2	598.4	21.78	28.483	
3,900.0	3,783.5	3,855.0	3,809.1	17.0	11.6	-145.74	-466.3	193.0	639.0	616.5	22.47	28.443	
4,000.0	3,879.7	3,953.2	3,905.8	17.5	11.9	-145.57	-482.7	198.7	657.7	634.6	23.16	28.405	
4,100.0	3,975.9	4,051.4	4,002.4	18.0	12.3	-145.41	-499.1	204.3	676.5	652.7	23.85	28.370	
4,200.0	4,072.2	4,149.6	4,099.1	18.6	12.6	-145.26	-515.5	210.0	695.3	670.8	24.54	28.336	
4,300.0	4,168.4	4,247.8	4,195.7	19.1	13.0	-145.12	-531.9	215.7	714.1	688.8	25.23	28.304	
4,400.0	4,264.6	4,346.0	4,292.4	19.6	13.3	-144.98	-548.3	221.4	732.9	706.9	25.92	28.274	
4,500.0	4,360.9	4,444.2	4,389.1	20.1	13.6	-144.86	-564.7	227.0	751.7	725.0	26.61	28.245	
4,600.0	4,457.1	4,542.4	4,485.7	20.6	14.0	-144.73	-581.1	232.7	770.4	743.1	27.30	28.218	
4,700.0	4,553.3	4,640.6	4,582.4	21.1	14.3	-144.62	-597.5	238.4	789.2	761.2	28.00	28.192	
4,800.0	4,649.6	4,738.8	4,679.0	21.6	14.7	-144.51	-613.9	244.0	808.0	779.4	28.69	28.167	
4,900.0	4,745.8	4,837.0	4,775.7	22.1	15.0	-144.40	-630.3	249.7	826.8	797.5	29.38	28.143	
5,000.0	4,842.0	4,935.3	4,872.4	22.6	15.4	-144.30	-646.7	255.4	845.6	815.6	30.07	28.121	
5,100.0	4,938.3	5,033.5	4,969.0	23.1	15.7	-144.20	-663.1	261.0	864.5	833.7	30.76	28.099	

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 OM07D 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:	OM07D B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

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

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,034.5	5,131.7	5,065.7	23.6	16.1	-144.11	-679.5	266.7	883.3	851.8	31.46	28.078	
5,300.0	5,130.7	5,229.9	5,162.3	24.1	16.4	-144.02	-695.9	272.4	902.1	869.9	32.15	28.058	
5,400.0	5,227.0	5,328.1	5,259.0	24.6	16.8	-143.94	-712.3	278.0	920.9	888.0	32.84	28.039	
5,500.0	5,323.2	5,426.3	5,355.7	25.2	17.1	-143.85	-728.7	283.7	939.7	906.2	33.54	28.021	
5,600.0	5,419.4	5,524.5	5,452.3	25.7	17.5	-143.78	-745.1	289.4	958.5	924.3	34.23	28.003	
5,700.0	5,515.7	5,622.7	5,549.0	26.2	17.8	-143.70	-761.5	295.1	977.3	942.4	34.92	27.986	
5,800.0	5,611.9	5,720.9	5,645.6	26.7	18.2	-143.63	-777.9	300.7	996.2	960.5	35.61	27.970	
5,900.0	5,708.2	5,819.1	5,742.3	27.2	18.5	-143.56	-794.3	306.4	1,015.0	978.7	36.31	27.955	
6,000.0	5,804.4	5,917.3	5,839.0	27.7	18.9	-143.49	-810.7	312.1	1,033.8	996.8	37.00	27.940	
6,100.0	5,900.6	6,015.5	5,935.6	28.2	19.2	-143.43	-827.1	317.7	1,052.6	1,014.9	37.69	27.925	
6,200.0	5,996.9	6,113.7	6,032.3	28.7	19.6	-143.36	-843.5	323.4	1,071.5	1,033.1	38.39	27.911	
6,300.0	6,093.1	6,211.9	6,128.9	29.2	19.9	-143.33	-859.9	329.1	1,090.3	1,051.2	39.08	27.896	
6,400.0	6,189.9	6,310.4	6,225.9	29.7	20.3	-143.41	-876.4	334.8	1,107.4	1,067.6	39.78	27.835	
6,500.0	6,287.5	6,409.3	6,323.2	30.1	20.6	-143.35	-892.9	340.5	1,121.8	1,081.3	40.49	27.702	
6,600.0	6,385.8	6,506.0	6,418.4	30.4	20.9	-143.18	-908.8	346.0	1,133.5	1,092.3	41.19	27.519	
6,700.0	6,484.7	6,600.0	6,511.4	30.7	21.2	-143.02	-922.1	350.5	1,142.8	1,101.1	41.77	27.359	
6,800.0	6,584.0	6,692.4	6,603.2	30.9	21.4	-142.89	-932.2	354.1	1,150.0	1,107.8	42.25	27.220	
6,900.0	6,683.7	6,786.0	6,696.5	31.1	21.6	-142.79	-939.7	356.6	1,155.0	1,112.3	42.63	27.093	
7,000.0	6,783.6	6,879.9	6,790.1	31.2	21.7	-142.71	-944.3	358.2	1,157.7	1,114.7	42.91	26.978	
7,100.0	6,883.6	6,973.8	6,884.0	31.2	21.8	-178.18	-945.9	358.8	1,158.2	1,115.1	43.11	26.863	
7,200.0	6,983.6	7,078.3	6,988.5	31.3	21.9	-178.18	-946.0	358.6	1,158.3	1,115.0	43.32	26.737	
7,300.0	7,083.6	7,183.6	7,093.8	31.4	22.1	-178.18	-946.4	358.0	1,158.4	1,114.9	43.53	26.610	
7,400.0	7,183.6	7,288.9	7,199.1	31.5	22.2	-178.18	-947.0	357.0	1,158.5	1,114.7	43.75	26.482	
7,500.0	7,283.6	7,389.9	7,300.2	31.6	22.3	-178.18	-947.7	355.8	1,158.5	1,114.5	43.95	26.357	
7,600.0	7,383.6	7,489.9	7,400.2	31.7	22.4	-178.18	-948.4	354.5	1,158.5	1,114.3	44.16	26.233	
7,700.0	7,483.5	7,589.9	7,500.2	31.8	22.5	-178.18	-949.1	353.3	1,158.5	1,114.1	44.37	26.109	
7,800.0	7,583.5	7,689.9	7,600.2	31.8	22.6	-178.18	-949.8	352.0	1,158.5	1,113.9	44.58	25.985	
7,900.0	7,683.5	7,789.9	7,700.1	31.9	22.7	-178.18	-950.6	350.8	1,158.5	1,113.7	44.80	25.861	
8,000.0	7,783.5	7,889.9	7,800.1	32.0	22.8	-178.18	-951.3	349.5	1,158.5	1,113.5	45.01	25.738	
8,100.0	7,883.5	7,989.9	7,900.1	32.1	22.9	-178.18	-952.0	348.3	1,158.5	1,113.3	45.23	25.614	
8,200.0	7,983.5	8,089.9	8,000.1	32.2	23.0	-178.18	-952.7	347.1	1,158.5	1,113.0	45.45	25.491	
8,300.0	8,083.5	8,189.9	8,100.1	32.3	23.1	-178.18	-953.4	345.8	1,158.5	1,112.8	45.67	25.368	
8,400.0	8,183.5	8,289.9	8,200.1	32.4	23.2	-178.18	-954.2	344.6	1,158.5	1,112.6	45.89	25.246	
8,500.0	8,283.5	8,389.9	8,300.1	32.5	23.4	-178.18	-954.9	343.3	1,158.5	1,112.4	46.11	25.123	
8,600.0	8,383.5	8,489.9	8,400.1	32.6	23.5	-178.18	-955.6	342.1	1,158.5	1,112.2	46.34	25.002	
8,700.0	8,483.4	8,589.9	8,500.1	32.7	23.6	-178.18	-956.3	340.8	1,158.5	1,111.9	46.56	24.880	
8,800.0	8,583.4	8,689.9	8,600.1	32.8	23.7	-178.18	-957.0	339.6	1,158.5	1,111.7	46.79	24.759	
8,900.0	8,683.4	8,789.9	8,700.0	32.9	23.8	-178.18	-957.8	338.4	1,158.5	1,111.5	47.02	24.638	
9,000.0	8,783.4	8,889.9	8,800.0	33.0	23.9	-178.18	-958.5	337.1	1,158.5	1,111.2	47.25	24.518	
9,100.0	8,883.4	8,989.9	8,900.0	33.1	24.1	-178.18	-959.2	335.9	1,158.5	1,111.0	47.48	24.398	
9,200.0	8,983.4	9,089.9	9,000.0	33.2	24.2	-178.18	-959.9	334.6	1,158.5	1,110.8	47.72	24.278	
9,300.0	9,083.4	9,189.9	9,100.0	33.3	24.3	-178.18	-960.6	333.4	1,158.5	1,110.5	47.95	24.159	
9,400.0	9,183.4	9,289.9	9,200.0	33.4	24.4	-178.18	-961.4	332.1	1,158.5	1,110.3	48.19	24.041	
9,500.0	9,283.4	9,389.9	9,300.0	33.5	24.5	-178.18	-962.1	330.9	1,158.5	1,110.1	48.43	23.923	
9,600.0	9,383.3	9,489.9	9,400.0	33.6	24.6	-178.18	-962.8	329.7	1,158.5	1,109.8	48.67	23.805	
9,700.0	9,483.3	9,589.9	9,500.0	33.7	24.8	-178.18	-963.5	328.4	1,158.5	1,109.6	48.91	23.688	
9,800.0	9,583.3	9,689.9	9,600.0	33.8	24.9	-178.18	-964.2	327.2	1,158.5	1,109.3	49.15	23.572	
9,900.0	9,683.3	9,789.9	9,699.9	33.9	25.0	-178.18	-964.9	325.9	1,158.5	1,109.1	49.39	23.456	
10,000.0	9,783.3	9,889.9	9,799.9	34.0	25.1	-178.18	-965.7	324.7	1,158.5	1,108.9	49.64	23.340	
10,027.7	9,811.0	9,917.6	9,827.6	34.1	25.2	-178.18	-965.9	324.3	1,158.5	1,108.8	49.70	23.308	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

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

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	29.60	43.7	24.8	50.3				
100.0	100.0	100.0	100.0	0.1	0.1	29.60	43.7	24.8	50.3	50.0	0.30	169.421	
200.0	200.0	200.0	200.0	0.3	0.3	29.60	43.7	24.8	50.3	49.6	0.65	77.842	CC
300.0	300.0	300.0	300.0	0.5	0.5	-97.37	43.7	24.8	50.5	49.5	1.00	50.541	ES
400.0	399.9	401.2	401.2	0.7	0.7	-142.91	42.0	25.4	51.5	50.1	1.36	37.967	
500.0	499.7	502.5	502.3	0.9	0.9	-159.36	37.0	27.2	53.6	51.8	1.72	31.111	
600.0	599.2	603.7	603.1	1.1	1.1	-163.35	28.6	30.3	56.8	54.7	2.11	26.919	
700.0	698.4	704.6	703.3	1.4	1.4	-161.68	16.9	34.5	61.6	59.1	2.55	24.212	
800.0	797.0	805.2	802.6	1.7	1.7	-157.23	1.9	39.9	68.8	65.7	3.07	22.439	
900.0	895.1	905.3	900.8	2.1	2.0	-151.70	-16.2	46.4	78.8	75.1	3.70	21.324	
1,000.0	992.4	1,004.4	997.4	2.5	2.4	-146.38	-37.1	53.9	92.2	87.8	4.43	20.821	
1,100.0	1,088.9	1,102.7	1,093.1	3.0	2.8	-142.86	-58.2	61.4	109.3	104.1	5.20	21.018	
1,200.0	1,185.2	1,200.8	1,188.7	3.4	3.2	-140.07	-79.3	69.0	127.6	121.6	6.00	21.279	
1,300.0	1,281.4	1,299.0	1,284.2	3.9	3.6	-137.98	-100.4	76.6	146.1	139.3	6.81	21.468	
1,400.0	1,377.6	1,397.1	1,379.8	4.4	4.1	-136.37	-121.5	84.2	164.8	157.2	7.63	21.610	
1,500.0	1,473.9	1,495.3	1,475.3	4.9	4.5	-135.08	-142.5	91.8	183.6	175.2	8.45	21.721	
1,600.0	1,570.1	1,593.4	1,570.9	5.4	4.9	-134.03	-163.6	99.3	202.5	193.2	9.28	21.809	
1,700.0	1,666.3	1,691.6	1,666.4	5.9	5.3	-133.16	-184.7	106.9	221.4	211.3	10.12	21.881	
1,800.0	1,762.6	1,789.7	1,762.0	6.4	5.7	-132.43	-205.8	114.5	240.4	229.4	10.95	21.941	
1,900.0	1,858.8	1,887.8	1,857.5	6.9	6.2	-131.80	-226.9	122.1	259.3	247.6	11.79	21.992	
2,000.0	1,955.0	1,986.0	1,953.1	7.4	6.6	-131.26	-248.0	129.6	278.4	265.7	12.63	22.035	
2,100.0	2,051.3	2,084.1	2,048.6	7.9	7.0	-130.79	-269.1	137.2	297.4	283.9	13.47	22.072	
2,200.0	2,147.5	2,182.3	2,144.2	8.4	7.4	-130.38	-290.2	144.8	316.5	302.1	14.32	22.105	
2,300.0	2,243.7	2,280.4	2,239.7	8.9	7.9	-130.01	-311.3	152.4	335.5	320.4	15.16	22.133	
2,400.0	2,340.0	2,378.6	2,335.3	9.4	8.3	-129.68	-332.3	160.0	354.6	338.6	16.00	22.159	
2,500.0	2,436.2	2,476.7	2,430.8	9.9	8.7	-129.39	-353.4	167.5	373.7	356.9	16.85	22.182	
2,600.0	2,532.4	2,574.8	2,526.4	10.4	9.1	-129.12	-374.5	175.1	392.8	375.1	17.69	22.202	
2,700.0	2,628.7	2,673.0	2,621.9	10.9	9.6	-128.88	-395.6	182.7	411.9	393.4	18.54	22.220	
2,800.0	2,724.9	2,771.1	2,717.5	11.5	10.0	-128.66	-416.7	190.3	431.0	411.6	19.38	22.237	
2,900.0	2,821.1	2,869.3	2,813.0	12.0	10.4	-128.46	-437.8	197.8	450.1	429.9	20.23	22.252	
3,000.0	2,917.4	2,967.4	2,908.6	12.5	10.8	-128.28	-458.9	205.4	469.3	448.2	21.07	22.266	
3,100.0	3,013.6	3,065.6	3,004.1	13.0	11.3	-128.11	-480.0	213.0	488.4	466.5	21.92	22.279	
3,200.0	3,109.8	3,163.7	3,099.7	13.5	11.7	-127.95	-501.1	220.6	507.5	484.8	22.77	22.291	
3,300.0	3,206.1	3,261.9	3,195.2	14.0	12.1	-127.80	-522.1	228.2	526.7	503.0	23.61	22.302	
3,400.0	3,302.3	3,360.0	3,290.8	14.5	12.5	-127.67	-543.2	235.7	545.8	521.3	24.46	22.312	
3,500.0	3,398.5	3,458.1	3,386.3	15.0	13.0	-127.54	-564.3	243.3	564.9	539.6	25.31	22.321	
3,600.0	3,494.8	3,556.3	3,481.9	15.5	13.4	-127.42	-585.4	250.9	584.1	557.9	26.16	22.330	
3,700.0	3,591.0	3,654.4	3,577.4	16.0	13.8	-127.31	-606.5	258.5	603.2	576.2	27.00	22.338	
3,800.0	3,687.2	3,752.6	3,673.0	16.5	14.3	-127.21	-627.6	266.0	622.4	594.5	27.85	22.346	
3,900.0	3,783.5	3,850.7	3,768.5	17.0	14.7	-127.11	-648.7	273.6	641.5	612.8	28.70	22.353	
4,000.0	3,879.7	3,948.9	3,864.1	17.5	15.1	-127.02	-669.8	281.2	660.7	631.1	29.55	22.360	
4,100.0	3,975.9	4,047.0	3,959.6	18.0	15.5	-126.93	-690.9	288.8	679.8	649.4	30.39	22.367	
4,200.0	4,072.2	4,145.1	4,055.2	18.6	16.0	-126.85	-712.0	296.4	699.0	667.7	31.24	22.373	
4,300.0	4,168.4	4,243.3	4,150.7	19.1	16.4	-126.77	-733.0	303.9	718.1	686.0	32.09	22.378	
4,400.0	4,264.6	4,341.4	4,246.3	19.6	16.8	-126.70	-754.1	311.5	737.3	704.4	32.94	22.384	
4,500.0	4,360.9	4,439.6	4,341.8	20.1	17.2	-126.63	-775.2	319.1	756.4	722.7	33.79	22.389	
4,600.0	4,457.1	4,537.7	4,437.4	20.6	17.7	-126.56	-796.3	326.7	775.6	741.0	34.63	22.394	
4,700.0	4,553.3	4,635.9	4,532.9	21.1	18.1	-126.50	-817.4	334.2	794.8	759.3	35.48	22.398	
4,800.0	4,649.6	4,734.0	4,628.5	21.6	18.5	-126.44	-838.5	341.8	813.9	777.6	36.33	22.403	
4,900.0	4,745.8	4,832.2	4,724.0	22.1	19.0	-126.38	-859.6	349.4	833.1	795.9	37.18	22.407	
5,000.0	4,842.0	4,930.3	4,819.6	22.6	19.4	-126.33	-880.7	357.0	852.3	814.2	38.03	22.411	
5,100.0	4,938.3	5,028.4	4,915.1	23.1	19.8	-126.27	-901.8	364.6	871.4	832.5	38.88	22.415	

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 OM07D 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:	OM07D 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
5,200.0	5,034.5	5,126.6	5,010.7	23.6	20.2	-126.22	-922.8	372.1	890.6	850.9	39.73	22.419	
5,300.0	5,130.7	5,224.7	5,106.2	24.1	20.7	-126.18	-943.9	379.7	909.7	869.2	40.57	22.422	
5,400.0	5,227.0	5,322.9	5,201.8	24.6	21.1	-126.13	-965.0	387.3	928.9	887.5	41.42	22.425	
5,500.0	5,323.2	5,421.0	5,297.3	25.2	21.5	-126.09	-986.1	394.9	948.1	905.8	42.27	22.429	
5,600.0	5,419.4	5,519.2	5,392.9	25.7	22.0	-126.04	-1,007.2	402.4	967.2	924.1	43.12	22.432	
5,700.0	5,515.7	5,617.3	5,488.4	26.2	22.4	-126.00	-1,028.3	410.0	986.4	942.4	43.97	22.435	
5,800.0	5,611.9	5,715.4	5,584.0	26.7	22.8	-125.96	-1,049.4	417.6	1,005.6	960.8	44.82	22.438	
5,900.0	5,708.2	5,813.6	5,679.6	27.2	23.2	-125.92	-1,070.5	425.2	1,024.7	979.1	45.67	22.440	
6,000.0	5,804.4	5,911.7	5,775.1	27.7	23.7	-125.89	-1,091.6	432.8	1,043.9	997.4	46.51	22.443	
6,100.0	5,900.6	6,009.9	5,870.7	28.2	24.1	-125.85	-1,112.6	440.3	1,063.1	1,015.7	47.36	22.445	
6,200.0	5,996.9	6,108.0	5,966.2	28.7	24.5	-125.82	-1,133.7	447.9	1,082.2	1,034.0	48.21	22.448	
6,300.0	6,093.1	6,206.2	6,061.8	29.2	24.9	-125.82	-1,154.8	455.5	1,101.4	1,052.3	49.06	22.449	
6,400.0	6,189.9	6,304.5	6,157.5	29.7	25.4	-125.99	-1,176.0	463.1	1,119.3	1,069.4	49.91	22.427	
6,500.0	6,287.5	6,404.3	6,254.7	30.1	25.8	-125.99	-1,197.3	470.8	1,135.3	1,084.5	50.74	22.375	
6,600.0	6,385.8	6,508.8	6,357.0	30.4	26.2	-125.93	-1,217.2	477.9	1,148.8	1,097.4	51.48	22.316	
6,700.0	6,484.7	6,613.9	6,460.6	30.7	26.5	-125.88	-1,233.7	483.8	1,159.9	1,107.8	52.11	22.260	
6,800.0	6,584.0	6,719.5	6,565.4	30.9	26.8	-125.82	-1,246.7	488.5	1,168.5	1,115.8	52.62	22.206	
6,900.0	6,683.7	6,825.6	6,670.9	31.1	27.0	-125.78	-1,256.0	491.8	1,174.5	1,121.4	53.02	22.153	
7,000.0	6,783.6	6,931.8	6,777.0	31.2	27.1	-125.73	-1,261.6	493.9	1,177.9	1,124.6	53.30	22.101	
7,100.0	6,883.6	7,038.3	6,883.4	31.2	27.2	-161.21	-1,263.6	494.6	1,178.8	1,125.3	53.48	22.041	
7,200.0	6,983.6	7,143.4	6,988.6	31.3	27.3	-161.21	-1,263.7	494.4	1,178.9	1,125.2	53.65	21.972	
7,300.0	7,083.6	7,248.6	7,093.7	31.4	27.4	-161.21	-1,264.1	493.8	1,179.0	1,125.1	53.83	21.901	
7,400.0	7,183.6	7,353.7	7,198.8	31.5	27.5	-161.21	-1,264.7	492.7	1,179.0	1,125.0	54.01	21.828	
7,500.0	7,283.6	7,454.5	7,299.6	31.6	27.6	-161.21	-1,265.4	491.5	1,179.0	1,124.8	54.19	21.755	
7,600.0	7,383.6	7,554.5	7,399.6	31.7	27.7	-161.21	-1,266.1	490.2	1,179.0	1,124.6	54.38	21.682	
7,700.0	7,483.5	7,654.5	7,499.6	31.8	27.8	-161.21	-1,266.8	489.0	1,179.0	1,124.4	54.56	21.609	
7,800.0	7,583.5	7,754.5	7,599.6	31.8	27.8	-161.21	-1,267.5	487.7	1,179.0	1,124.3	54.75	21.535	
7,900.0	7,683.5	7,854.5	7,699.6	31.9	27.9	-161.21	-1,268.2	486.5	1,179.0	1,124.1	54.94	21.462	
8,000.0	7,783.5	7,954.5	7,799.6	32.0	28.0	-161.21	-1,269.0	485.3	1,179.0	1,123.9	55.12	21.388	
8,100.0	7,883.5	8,054.5	7,899.6	32.1	28.1	-161.21	-1,269.7	484.0	1,179.0	1,123.7	55.31	21.314	
8,200.0	7,983.5	8,154.5	7,999.5	32.2	28.2	-161.21	-1,270.4	482.8	1,179.0	1,123.5	55.51	21.240	
8,300.0	8,083.5	8,254.5	8,099.5	32.3	28.3	-161.21	-1,271.1	481.5	1,179.0	1,123.3	55.70	21.167	
8,400.0	8,183.5	8,354.5	8,199.5	32.4	28.4	-161.21	-1,271.8	480.3	1,179.0	1,123.1	55.90	21.093	
8,500.0	8,283.5	8,454.5	8,299.5	32.5	28.5	-161.21	-1,272.6	479.0	1,179.0	1,122.9	56.09	21.019	
8,600.0	8,383.5	8,554.5	8,399.5	32.6	28.6	-161.21	-1,273.3	477.8	1,179.0	1,122.7	56.29	20.944	
8,700.0	8,483.4	8,654.5	8,499.5	32.7	28.7	-161.21	-1,274.0	476.5	1,179.0	1,122.5	56.49	20.870	
8,800.0	8,583.4	8,754.5	8,599.5	32.8	28.8	-161.21	-1,274.7	475.3	1,179.0	1,122.3	56.69	20.796	
8,900.0	8,683.4	8,854.5	8,699.5	32.9	28.9	-161.21	-1,275.4	474.0	1,179.0	1,122.1	56.89	20.722	
9,000.0	8,783.4	8,954.5	8,799.5	33.0	29.0	-161.21	-1,276.1	472.8	1,179.0	1,121.9	57.10	20.648	
9,100.0	8,883.4	9,054.5	8,899.4	33.1	29.1	-161.21	-1,276.9	471.6	1,179.0	1,121.7	57.30	20.574	
9,200.0	8,983.4	9,154.5	8,999.4	33.2	29.2	-161.21	-1,277.6	470.3	1,179.0	1,121.5	57.51	20.500	
9,300.0	9,083.4	9,254.5	9,099.4	33.3	29.3	-161.21	-1,278.3	469.1	1,179.0	1,121.3	57.72	20.426	
9,400.0	9,183.4	9,354.5	9,199.4	33.4	29.4	-161.21	-1,279.0	467.8	1,179.0	1,121.0	57.93	20.352	
9,500.0	9,283.4	9,454.5	9,299.4	33.5	29.5	-161.21	-1,279.7	466.6	1,179.0	1,120.8	58.14	20.278	
9,600.0	9,383.3	9,554.5	9,399.4	33.6	29.6	-161.21	-1,280.4	465.3	1,179.0	1,120.6	58.35	20.205	
9,700.0	9,483.3	9,654.5	9,499.4	33.7	29.7	-161.21	-1,281.2	464.1	1,179.0	1,120.4	58.56	20.131	
9,800.0	9,583.3	9,754.5	9,599.4	33.8	29.8	-161.21	-1,281.9	462.8	1,179.0	1,120.2	58.78	20.057	
9,900.0	9,683.3	9,854.5	9,699.4	33.9	29.9	-161.21	-1,282.6	461.6	1,179.0	1,120.0	59.00	19.984	
10,000.0	9,783.3	9,954.5	9,799.4	34.0	30.0	-161.21	-1,283.3	460.4	1,179.0	1,119.7	59.21	19.910	
10,027.7	9,811.0	9,982.2	9,827.1	34.1	30.0	-161.21	-1,283.5	460.0	1,179.0	1,119.7	59.27	19.890	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

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

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	29.71	60.8	34.7	70.0				
100.0	100.0	100.0	100.0	0.1	0.1	29.71	60.8	34.7	70.0	69.7	0.30	236.015	
200.0	200.0	200.0	200.0	0.3	0.3	29.71	60.8	34.7	70.0	69.4	0.65	108.439	
300.0	300.0	301.5	301.5	0.5	0.5	-95.58	59.2	35.4	69.1	68.1	1.00	68.872	
400.0	399.9	402.9	402.8	0.7	0.7	-138.12	54.2	37.5	68.0	66.6	1.38	49.412	
429.2	429.1	432.6	432.3	0.7	0.8	-144.27	52.2	38.4	67.9	66.4	1.49	45.565	CC, ES
500.0	499.7	504.2	503.7	0.9	0.9	-152.33	46.0	41.1	68.3	66.6	1.78	38.499	
600.0	599.2	605.3	603.9	1.1	1.2	-154.71	34.5	46.0	70.6	68.4	2.22	31.752	
700.0	698.4	705.8	703.2	1.4	1.5	-152.04	19.9	52.3	75.6	72.8	2.75	27.449	
800.0	797.0	805.8	801.3	1.7	1.9	-147.20	2.2	59.9	83.8	80.5	3.38	24.780	
900.0	895.1	905.0	897.9	2.1	2.3	-141.81	-18.5	68.8	95.8	91.7	4.12	23.259	
1,000.0	992.4	1,003.3	992.9	2.5	2.8	-136.75	-42.0	78.9	111.7	106.8	4.96	22.530	
1,100.0	1,088.9	1,100.9	1,086.3	3.0	3.3	-132.49	-67.7	89.9	131.3	125.5	5.86	22.410	
1,200.0	1,185.2	1,198.3	1,179.5	3.4	3.8	-129.08	-93.6	101.0	152.3	145.6	6.78	22.458	
1,300.0	1,281.4	1,295.7	1,272.8	3.9	4.3	-126.50	-119.5	112.1	173.8	166.0	7.71	22.524	
1,400.0	1,377.6	1,393.1	1,366.0	4.4	4.8	-124.49	-145.4	123.3	195.4	186.8	8.65	22.594	
1,500.0	1,473.9	1,490.5	1,459.3	4.9	5.3	-122.88	-171.3	134.4	217.3	207.7	9.59	22.664	
1,600.0	1,570.1	1,588.0	1,552.5	5.4	5.9	-121.56	-197.2	145.5	239.3	228.8	10.53	22.730	
1,700.0	1,666.3	1,685.4	1,645.8	5.9	6.4	-120.47	-223.1	156.6	261.4	249.9	11.47	22.791	
1,800.0	1,762.6	1,782.8	1,739.0	6.4	6.9	-119.54	-249.0	167.7	283.6	271.1	12.41	22.848	
1,900.0	1,858.8	1,880.2	1,832.3	6.9	7.4	-118.75	-274.9	178.9	305.8	292.4	13.35	22.900	
2,000.0	1,955.0	1,977.6	1,925.5	7.4	7.9	-118.07	-300.8	190.0	328.1	313.8	14.30	22.948	
2,100.0	2,051.3	2,075.0	2,018.8	7.9	8.4	-117.47	-326.7	201.1	350.4	335.1	15.24	22.992	
2,200.0	2,147.5	2,172.5	2,112.0	8.4	9.0	-116.95	-352.6	212.2	372.7	356.6	16.18	23.032	
2,300.0	2,243.7	2,269.9	2,205.3	8.9	9.5	-116.48	-378.5	223.3	395.1	378.0	17.13	23.069	
2,400.0	2,340.0	2,367.3	2,298.5	9.4	10.0	-116.07	-404.4	234.5	417.5	399.4	18.07	23.104	
2,500.0	2,436.2	2,464.7	2,391.8	9.9	10.5	-115.69	-430.3	245.6	439.9	420.9	19.02	23.135	
2,600.0	2,532.4	2,562.1	2,485.0	10.4	11.1	-115.36	-456.2	256.7	462.4	442.4	19.96	23.165	
2,700.0	2,628.7	2,659.5	2,578.3	10.9	11.6	-115.05	-482.1	267.8	484.8	463.9	20.90	23.192	
2,800.0	2,724.9	2,757.0	2,671.5	11.5	12.1	-114.77	-508.0	278.9	507.3	485.4	21.85	23.217	
2,900.0	2,821.1	2,854.4	2,764.8	12.0	12.6	-114.52	-533.9	290.1	529.7	506.9	22.79	23.241	
3,000.0	2,917.4	2,951.8	2,858.0	12.5	13.1	-114.28	-559.8	301.2	552.2	528.5	23.74	23.263	
3,100.0	3,013.6	3,049.2	2,951.3	13.0	13.7	-114.07	-585.6	312.3	574.7	550.0	24.68	23.284	
3,200.0	3,109.8	3,146.6	3,044.6	13.5	14.2	-113.87	-611.5	323.4	597.2	571.6	25.63	23.303	
3,300.0	3,206.1	3,244.0	3,137.8	14.0	14.7	-113.68	-637.4	334.6	619.7	593.1	26.57	23.322	
3,400.0	3,302.3	3,341.5	3,231.1	14.5	15.2	-113.51	-663.3	345.7	642.2	614.7	27.52	23.339	
3,500.0	3,398.5	3,438.9	3,324.3	15.0	15.8	-113.35	-689.2	356.8	664.7	636.3	28.46	23.355	
3,600.0	3,494.8	3,536.3	3,417.6	15.5	16.3	-113.20	-715.1	367.9	687.2	657.8	29.41	23.370	
3,700.0	3,591.0	3,633.7	3,510.8	16.0	16.8	-113.06	-741.0	379.0	709.8	679.4	30.35	23.384	
3,800.0	3,687.2	3,731.1	3,604.1	16.5	17.3	-112.93	-766.9	390.2	732.3	701.0	31.30	23.398	
3,900.0	3,783.5	3,828.5	3,697.3	17.0	17.8	-112.80	-792.8	401.3	754.8	722.6	32.24	23.411	
4,000.0	3,879.7	3,926.0	3,790.6	17.5	18.4	-112.68	-818.7	412.4	777.3	744.2	33.19	23.423	
4,100.0	3,975.9	4,023.4	3,883.8	18.0	18.9	-112.57	-844.6	423.5	799.9	765.7	34.13	23.435	
4,200.0	4,072.2	4,120.8	3,977.1	18.6	19.4	-112.47	-870.5	434.6	822.4	787.3	35.08	23.446	
4,300.0	4,168.4	4,218.2	4,070.3	19.1	19.9	-112.37	-896.4	445.8	844.9	808.9	36.02	23.457	
4,400.0	4,264.6	4,315.6	4,163.6	19.6	20.5	-112.28	-922.3	456.9	867.5	830.5	36.97	23.467	
4,500.0	4,360.9	4,413.0	4,256.8	20.1	21.0	-112.19	-948.2	468.0	890.0	852.1	37.91	23.477	
4,600.0	4,457.1	4,510.5	4,350.1	20.6	21.5	-112.10	-974.1	479.1	912.6	873.7	38.86	23.486	
4,700.0	4,553.3	4,607.9	4,443.3	21.1	22.0	-112.02	-1,000.0	490.2	935.1	895.3	39.80	23.495	
4,800.0	4,649.6	4,705.3	4,536.6	21.6	22.6	-111.95	-1,025.9	501.4	957.7	916.9	40.75	23.503	
4,900.0	4,745.8	4,802.7	4,629.8	22.1	23.1	-111.87	-1,051.8	512.5	980.2	938.5	41.69	23.511	
5,000.0	4,842.0	4,900.1	4,723.1	22.6	23.6	-111.80	-1,077.7	523.6	1,002.8	960.1	42.64	23.519	

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 OM07D 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:	OM07D 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	4,938.3	4,997.5	4,816.3	23.1	24.1	-111.74	-1,103.6	534.7	1,025.3	981.7	43.58	23.526	
5,200.0	5,034.5	5,095.0	4,909.6	23.6	24.6	-111.67	-1,129.5	545.8	1,047.9	1,003.4	44.53	23.534	
5,300.0	5,130.7	5,192.4	5,002.8	24.1	25.2	-111.61	-1,155.4	557.0	1,070.4	1,025.0	45.47	23.540	
5,400.0	5,227.0	5,289.8	5,096.1	24.6	25.7	-111.55	-1,181.3	568.1	1,093.0	1,046.6	46.42	23.547	
5,500.0	5,323.2	5,387.2	5,189.3	25.2	26.2	-111.50	-1,207.2	579.2	1,115.6	1,068.2	47.36	23.553	
5,600.0	5,419.4	5,484.6	5,282.6	25.7	26.7	-111.44	-1,233.1	590.3	1,138.1	1,089.8	48.31	23.560	
5,700.0	5,515.7	5,582.0	5,375.8	26.2	27.3	-111.39	-1,259.0	601.5	1,160.7	1,111.4	49.25	23.566	
5,800.0	5,611.9	5,679.5	5,469.1	26.7	27.8	-111.34	-1,284.9	612.6	1,183.2	1,133.0	50.20	23.571	
5,900.0	5,708.2	5,776.9	5,562.3	27.2	28.3	-111.29	-1,310.8	623.7	1,205.8	1,154.6	51.14	23.577	
6,000.0	5,804.4	5,874.3	5,655.6	27.7	28.8	-111.25	-1,336.7	634.8	1,228.4	1,176.3	52.09	23.582	
6,100.0	5,900.6	5,971.7	5,748.8	28.2	29.4	-111.20	-1,362.6	645.9	1,250.9	1,197.9	53.03	23.587	
6,200.0	5,996.9	6,069.1	5,842.1	28.7	29.9	-111.16	-1,388.5	657.1	1,273.5	1,219.5	53.98	23.592	
6,300.0	6,093.1	6,166.5	5,935.3	29.2	30.4	-111.17	-1,414.4	668.2	1,296.0	1,241.1	54.93	23.593	
6,400.0	6,189.9	6,264.1	6,028.7	29.7	30.9	-111.45	-1,440.3	679.3	1,317.8	1,261.9	55.91	23.572	
6,500.0	6,287.5	6,379.9	6,140.0	30.1	31.5	-111.57	-1,469.8	692.0	1,337.9	1,281.1	56.86	23.530	
6,600.0	6,385.8	6,503.1	6,259.7	30.4	32.0	-111.65	-1,496.7	703.5	1,355.0	1,297.3	57.71	23.479	
6,700.0	6,484.7	6,627.5	6,381.6	30.7	32.5	-111.71	-1,519.1	713.1	1,369.1	1,310.6	58.43	23.432	
6,800.0	6,584.0	6,752.9	6,505.6	30.9	32.8	-111.74	-1,536.7	720.7	1,379.9	1,320.9	59.00	23.387	
6,900.0	6,683.7	6,879.1	6,631.0	31.1	33.1	-111.76	-1,549.3	726.1	1,387.6	1,328.2	59.45	23.342	
7,000.0	6,783.6	7,005.8	6,757.4	31.2	33.3	-111.75	-1,556.9	729.4	1,392.1	1,332.4	59.75	23.298	
7,100.0	6,883.6	7,132.2	6,883.7	31.2	33.4	-147.25	-1,559.4	730.5	1,393.4	1,333.5	59.93	23.251	
7,200.0	6,983.6	7,237.6	6,989.1	31.3	33.4	-147.25	-1,559.5	730.2	1,393.5	1,333.4	60.09	23.191	
7,300.0	7,083.6	7,343.0	7,094.5	31.4	33.5	-147.25	-1,559.9	729.6	1,393.5	1,333.3	60.25	23.128	
7,400.0	7,183.6	7,448.4	7,199.9	31.5	33.6	-147.25	-1,560.5	728.5	1,393.6	1,333.1	60.43	23.062	
7,500.0	7,283.6	7,548.9	7,300.4	31.6	33.6	-147.25	-1,561.2	727.3	1,393.6	1,333.0	60.60	22.995	
7,600.0	7,383.6	7,648.9	7,400.4	31.7	33.7	-147.25	-1,561.9	726.0	1,393.6	1,332.8	60.78	22.929	
7,700.0	7,483.5	7,748.9	7,500.4	31.8	33.8	-147.25	-1,562.6	724.8	1,393.6	1,332.6	60.96	22.862	
7,800.0	7,583.5	7,848.9	7,600.4	31.8	33.9	-147.25	-1,563.4	723.5	1,393.6	1,332.4	61.14	22.795	
7,900.0	7,683.5	7,948.9	7,700.4	31.9	33.9	-147.25	-1,564.1	722.3	1,393.6	1,332.2	61.32	22.728	
8,000.0	7,783.5	8,048.9	7,800.4	32.0	34.0	-147.25	-1,564.8	721.1	1,393.6	1,332.1	61.50	22.660	
8,100.0	7,883.5	8,148.9	7,900.4	32.1	34.1	-147.25	-1,565.5	719.8	1,393.5	1,331.9	61.68	22.593	
8,200.0	7,983.5	8,248.9	8,000.4	32.2	34.2	-147.25	-1,566.2	718.6	1,393.5	1,331.7	61.87	22.525	
8,300.0	8,083.5	8,348.9	8,100.3	32.3	34.2	-147.25	-1,566.9	717.3	1,393.5	1,331.5	62.05	22.458	
8,400.0	8,183.5	8,448.9	8,200.3	32.4	34.3	-147.25	-1,567.7	716.1	1,393.5	1,331.3	62.24	22.390	
8,500.0	8,283.5	8,548.9	8,300.3	32.5	34.4	-147.25	-1,568.4	714.8	1,393.5	1,331.1	62.43	22.322	
8,600.0	8,383.5	8,648.9	8,400.3	32.6	34.5	-147.25	-1,569.1	713.6	1,393.5	1,330.9	62.62	22.254	
8,700.0	8,483.4	8,748.9	8,500.3	32.7	34.5	-147.25	-1,569.8	712.3	1,393.5	1,330.7	62.81	22.186	
8,800.0	8,583.4	8,848.9	8,600.3	32.8	34.6	-147.25	-1,570.5	711.1	1,393.5	1,330.5	63.00	22.118	
8,900.0	8,683.4	8,948.9	8,700.3	32.9	34.7	-147.25	-1,571.2	709.9	1,393.5	1,330.3	63.20	22.050	
9,000.0	8,783.4	9,048.9	8,800.3	33.0	34.8	-147.25	-1,572.0	708.6	1,393.5	1,330.1	63.40	21.981	
9,100.0	8,883.4	9,148.9	8,900.3	33.1	34.9	-147.25	-1,572.7	707.4	1,393.5	1,329.9	63.59	21.913	
9,200.0	8,983.4	9,248.9	9,000.3	33.2	35.0	-147.25	-1,573.4	706.1	1,393.5	1,329.7	63.79	21.845	
9,300.0	9,083.4	9,348.9	9,100.2	33.3	35.0	-147.25	-1,574.1	704.9	1,393.5	1,329.5	63.99	21.777	
9,400.0	9,183.4	9,448.9	9,200.2	33.4	35.1	-147.25	-1,574.8	703.6	1,393.5	1,329.3	64.19	21.708	
9,500.0	9,283.4	9,548.9	9,300.2	33.5	35.2	-147.25	-1,575.5	702.4	1,393.5	1,329.1	64.39	21.640	
9,600.0	9,383.3	9,648.9	9,400.2	33.6	35.3	-147.25	-1,576.3	701.1	1,393.5	1,328.9	64.60	21.572	
9,700.0	9,483.3	9,748.9	9,500.2	33.7	35.4	-147.25	-1,577.0	699.9	1,393.5	1,328.7	64.80	21.504	
9,800.0	9,583.3	9,848.9	9,600.2	33.8	35.5	-147.25	-1,577.7	698.6	1,393.5	1,328.5	65.01	21.435	
9,900.0	9,683.3	9,948.9	9,700.2	33.9	35.6	-147.25	-1,578.4	697.4	1,393.5	1,328.3	65.22	21.367	
10,000.0	9,783.3	10,048.9	9,800.2	34.0	35.6	-147.25	-1,579.1	696.2	1,393.5	1,328.1	65.43	21.299	
10,027.7	9,811.0	10,076.6	9,827.9	34.1	35.7	-147.25	-1,579.3	695.8	1,393.5	1,328.0	65.48	21.280 SF	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM07D 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:	OM07D B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KBE @ 8293.0ft (Original Well Elev)	Coordinates are relative to: OM07D B21 696
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Central Zone
Central Meridian is -105.500000 °	Grid Convergence at Surface is: -1.65°