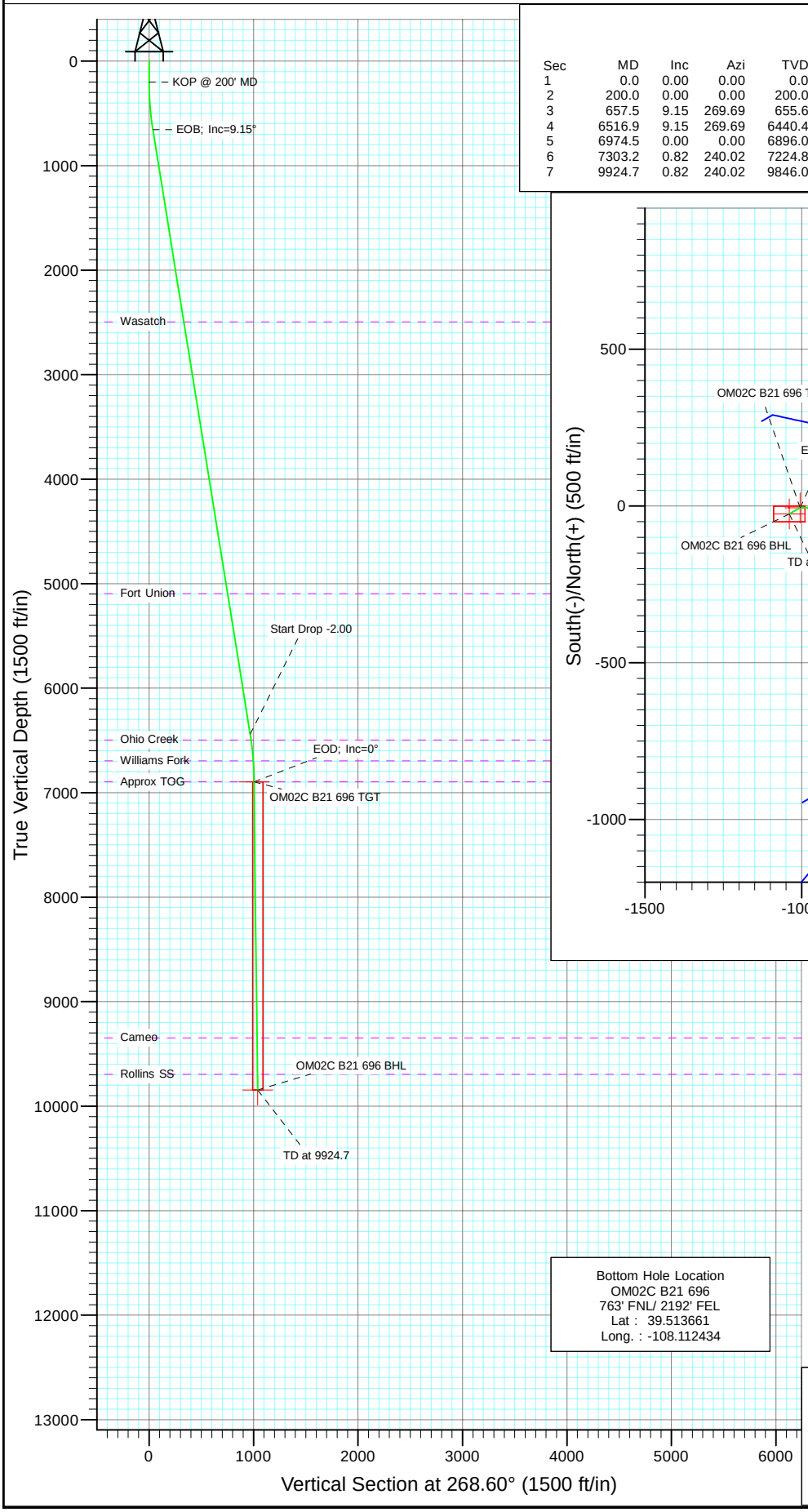
Berry Petroleum Company

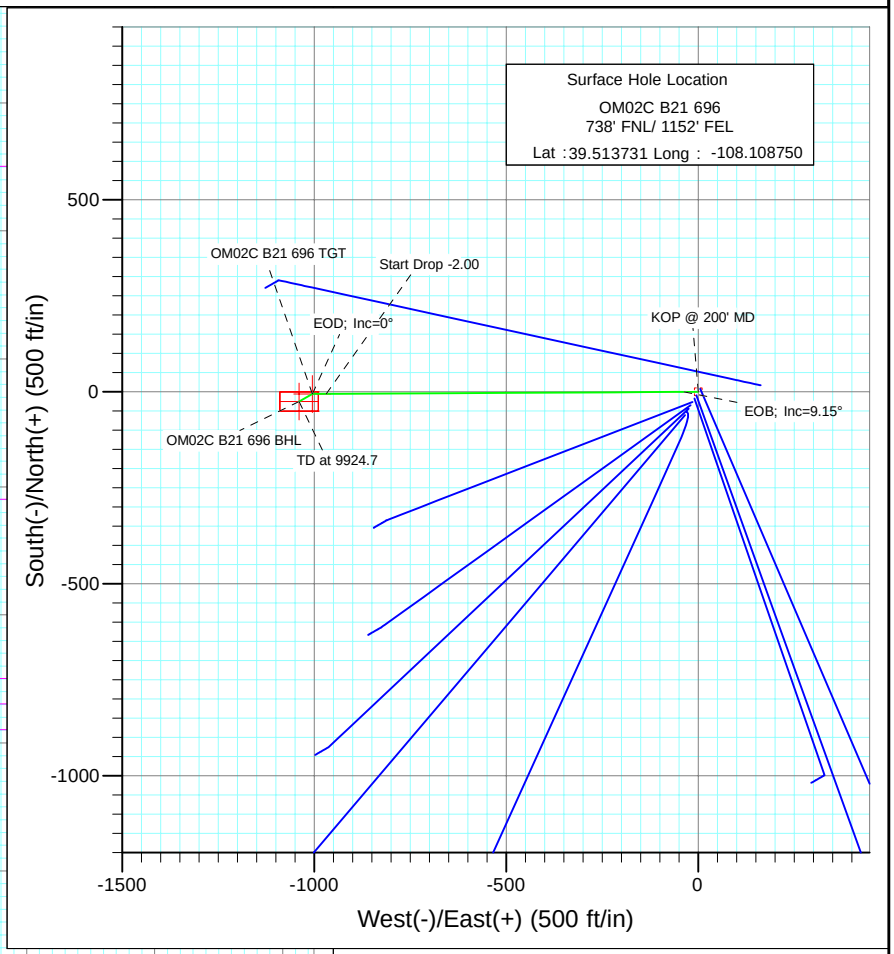
Project: Garfield County
Site: NENE S21-T6S-R96W (B21 696 Pad)
Well: OM02C B21 696
Wellbore: DD
Design: Plan #1

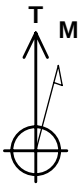
CATHEDRAL

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	657.5	9.15	269.69	655.6	-0.2	-36.5	2.00	269.69	36.5	
4	6516.9	9.15	269.69	6440.4	-5.3	-968.3	0.00	0.00	968.1	
5	6974.5	0.00	0.00	6896.0	-5.5	-1004.7	2.00	180.00	1004.6	OM02C B21 696 TGT
6	7303.2	0.82	240.02	7224.8	-6.7	-1006.8	0.25	240.02	1006.7	
7	9924.7	0.82	240.02	9846.0	-25.5	-1039.4	0.00	0.00	1039.7	OM02C B21 696 BHL







Azimuths to True North
Magnetic North: 10.45°

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

Bottom Hole Location
OM02C B21 696
763' FNL/ 2192' FEL
Lat : 39.513661
Long. : -108.112434

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2496.0	2521.7	Wasatch
5096.0	5155.2	Fort Union
6496.0	6573.1	Ohio Creek
6696.0	6774.3	Williams Fork
6896.0	6974.5	Approx TOG
9346.0	9424.7	Cameo
9696.0	9774.7	Rollins SS

DESIGN DETAILS: Plan #1

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

Target	Azimuth	Origin	N/S	E/W	From TVD
OM02C B21 696 BHL	268.60	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 OM02C 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:	OM02C 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 OM02C B21 696

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,622,575.30 ft	**Latitude:**	39.513731
	+E/-W	0.0 ft	**Easting:**	2,264,100.66 ft	**Longitude:**	-108.108750
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	268.60

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	
657.5	9.15	269.69	655.6	-0.2	-36.5	2.00	2.00	0.00	269.69	
6,516.9	9.15	269.69	6,440.4	-5.3	-968.3	0.00	0.00	0.00	0.00	
6,974.5	0.00	0.00	6,896.0	-5.5	-1,004.7	2.00	-2.00	0.00	180.00	OM02C B21 696 TGT
7,303.2	0.82	240.02	7,224.8	-6.7	-1,006.8	0.25	0.25	-36.49	240.02	
9,924.7	0.82	240.02	9,846.0	-25.5	-1,039.4	0.00	0.00	0.00	0.00	OM02C B21 696 BHL

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C 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	269.69	210.0	0.0	0.0	0.0	2.00	2.00	
240.0	0.80	269.69	240.0	0.0	-0.3	0.3	2.00	2.00	
270.0	1.40	269.69	270.0	0.0	-0.9	0.9	2.00	2.00	
300.0	2.00	269.69	300.0	0.0	-1.7	1.7	2.00	2.00	
330.0	2.60	269.69	330.0	0.0	-2.9	2.9	2.00	2.00	
360.0	3.20	269.69	359.9	0.0	-4.5	4.5	2.00	2.00	
390.0	3.80	269.69	389.9	0.0	-6.3	6.3	2.00	2.00	
420.0	4.40	269.69	419.8	0.0	-8.4	8.4	2.00	2.00	
450.0	5.00	269.69	449.7	-0.1	-10.9	10.9	2.00	2.00	
480.0	5.60	269.69	479.6	-0.1	-13.7	13.7	2.00	2.00	
510.0	6.20	269.69	509.4	-0.1	-16.8	16.8	2.00	2.00	
540.0	6.80	269.69	539.2	-0.1	-20.2	20.1	2.00	2.00	
570.0	7.40	269.69	569.0	-0.1	-23.9	23.9	2.00	2.00	
600.0	8.00	269.69	598.7	-0.2	-27.9	27.9	2.00	2.00	
630.0	8.60	269.69	628.4	-0.2	-32.2	32.2	2.00	2.00	
657.5	9.15	269.69	655.6	-0.2	-36.5	36.5	2.00	2.00	EOB; Inc=9.15°
660.0	9.15	269.69	658.0	-0.2	-36.9	36.8	0.00	0.00	
690.0	9.15	269.69	687.6	-0.2	-41.6	41.6	0.00	0.00	
720.0	9.15	269.69	717.3	-0.3	-46.4	46.4	0.00	0.00	
750.0	9.15	269.69	746.9	-0.3	-51.2	51.2	0.00	0.00	
780.0	9.15	269.69	776.5	-0.3	-55.9	55.9	0.00	0.00	
810.0	9.15	269.69	806.1	-0.3	-60.7	60.7	0.00	0.00	
840.0	9.15	269.69	835.7	-0.4	-65.5	65.5	0.00	0.00	
870.0	9.15	269.69	865.4	-0.4	-70.2	70.2	0.00	0.00	
900.0	9.15	269.69	895.0	-0.4	-75.0	75.0	0.00	0.00	
930.0	9.15	269.69	924.6	-0.4	-79.8	79.8	0.00	0.00	
960.0	9.15	269.69	954.2	-0.5	-84.6	84.5	0.00	0.00	
990.0	9.15	269.69	983.8	-0.5	-89.3	89.3	0.00	0.00	
1,020.0	9.15	269.69	1,013.4	-0.5	-94.1	94.1	0.00	0.00	
1,050.0	9.15	269.69	1,043.1	-0.5	-98.9	98.9	0.00	0.00	
1,080.0	9.15	269.69	1,072.7	-0.6	-103.6	103.6	0.00	0.00	
1,110.0	9.15	269.69	1,102.3	-0.6	-108.4	108.4	0.00	0.00	
1,140.0	9.15	269.69	1,131.9	-0.6	-113.2	113.2	0.00	0.00	
1,170.0	9.15	269.69	1,161.5	-0.6	-118.0	117.9	0.00	0.00	
1,200.0	9.15	269.69	1,191.2	-0.7	-122.7	122.7	0.00	0.00	
1,230.0	9.15	269.69	1,220.8	-0.7	-127.5	127.5	0.00	0.00	
1,260.0	9.15	269.69	1,250.4	-0.7	-132.3	132.2	0.00	0.00	
1,290.0	9.15	269.69	1,280.0	-0.8	-137.0	137.0	0.00	0.00	
1,320.0	9.15	269.69	1,309.6	-0.8	-141.8	141.8	0.00	0.00	
1,350.0	9.15	269.69	1,339.2	-0.8	-146.6	146.6	0.00	0.00	
1,380.0	9.15	269.69	1,368.9	-0.8	-151.4	151.3	0.00	0.00	
1,410.0	9.15	269.69	1,398.5	-0.9	-156.1	156.1	0.00	0.00	
1,440.0	9.15	269.69	1,428.1	-0.9	-160.9	160.9	0.00	0.00	
1,470.0	9.15	269.69	1,457.7	-0.9	-165.7	165.6	0.00	0.00	

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Site:	NENE S21-T6S-R96W (B21 696 Pad)	**North Reference:**	True
Well:	OM02C B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
1,500.0	9.15	269.69	1,487.3	-0.9	-170.4	170.4	0.00	0.00	
1,530.0	9.15	269.69	1,517.0	-1.0	-175.2	175.2	0.00	0.00	
1,560.0	9.15	269.69	1,546.6	-1.0	-180.0	179.9	0.00	0.00	
1,590.0	9.15	269.69	1,576.2	-1.0	-184.8	184.7	0.00	0.00	
1,620.0	9.15	269.69	1,605.8	-1.0	-189.5	189.5	0.00	0.00	
1,650.0	9.15	269.69	1,635.4	-1.1	-194.3	194.3	0.00	0.00	
1,680.0	9.15	269.69	1,665.0	-1.1	-199.1	199.0	0.00	0.00	
1,710.0	9.15	269.69	1,694.7	-1.1	-203.8	203.8	0.00	0.00	
1,740.0	9.15	269.69	1,724.3	-1.1	-208.6	208.6	0.00	0.00	
1,770.0	9.15	269.69	1,753.9	-1.2	-213.4	213.3	0.00	0.00	
1,800.0	9.15	269.69	1,783.5	-1.2	-218.1	218.1	0.00	0.00	
1,830.0	9.15	269.69	1,813.1	-1.2	-222.9	222.9	0.00	0.00	
1,860.0	9.15	269.69	1,842.8	-1.2	-227.7	227.7	0.00	0.00	
1,890.0	9.15	269.69	1,872.4	-1.3	-232.5	232.4	0.00	0.00	
1,920.0	9.15	269.69	1,902.0	-1.3	-237.2	237.2	0.00	0.00	
1,950.0	9.15	269.69	1,931.6	-1.3	-242.0	242.0	0.00	0.00	
1,980.0	9.15	269.69	1,961.2	-1.4	-246.8	246.7	0.00	0.00	
2,010.0	9.15	269.69	1,990.8	-1.4	-251.5	251.5	0.00	0.00	
2,040.0	9.15	269.69	2,020.5	-1.4	-256.3	256.3	0.00	0.00	
2,070.0	9.15	269.69	2,050.1	-1.4	-261.1	261.0	0.00	0.00	
2,100.0	9.15	269.69	2,079.7	-1.5	-265.9	265.8	0.00	0.00	
2,130.0	9.15	269.69	2,109.3	-1.5	-270.6	270.6	0.00	0.00	
2,160.0	9.15	269.69	2,138.9	-1.5	-275.4	275.4	0.00	0.00	
2,190.0	9.15	269.69	2,168.6	-1.5	-280.2	280.1	0.00	0.00	
2,220.0	9.15	269.69	2,198.2	-1.6	-284.9	284.9	0.00	0.00	
2,250.0	9.15	269.69	2,227.8	-1.6	-289.7	289.7	0.00	0.00	
2,280.0	9.15	269.69	2,257.4	-1.6	-294.5	294.4	0.00	0.00	
2,310.0	9.15	269.69	2,287.0	-1.6	-299.3	299.2	0.00	0.00	
2,340.0	9.15	269.69	2,316.6	-1.7	-304.0	304.0	0.00	0.00	
2,370.0	9.15	269.69	2,346.3	-1.7	-308.8	308.7	0.00	0.00	
2,400.0	9.15	269.69	2,375.9	-1.7	-313.6	313.5	0.00	0.00	
2,430.0	9.15	269.69	2,405.5	-1.7	-318.3	318.3	0.00	0.00	
2,460.0	9.15	269.69	2,435.1	-1.8	-323.1	323.1	0.00	0.00	
2,490.0	9.15	269.69	2,464.7	-1.8	-327.9	327.8	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
OM02C B21 696 TGT	0.00	0.00	6,896.0	-5.5	-1,004.7	1,622,598.65	2,263,096.16	39.513716	-108.112311
- plan misses target center by 4482.7ft at 2490.0ft MD (2464.7 TVD, -1.8 N, -327.9 E)									
- Point									
OM02C B21 696 BHL	0.00	0.00	9,846.0	-25.5	-1,039.4	1,622,579.68	2,263,060.99	39.513661	-108.112434
- plan misses target center by 7415.5ft at 2490.0ft MD (2464.7 TVD, -1.8 N, -327.9 E)									
- Rectangle (sides W50.0 H100.0 D0.0)									

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Well:	OM02C B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
2,500.0	9.15	269.69	2,474.6	-1.8	-329.5	329.4	0.00	0.00	
2,521.7	9.15	269.69	2,496.0	-1.8	-332.9	332.9	0.00	0.00	Wasatch
2,600.0	9.15	269.69	2,573.3	-1.9	-345.4	345.3	0.00	0.00	
2,700.0	9.15	269.69	2,672.1	-2.0	-361.3	361.2	0.00	0.00	
2,800.0	9.15	269.69	2,770.8	-2.1	-377.2	377.1	0.00	0.00	
2,900.0	9.15	269.69	2,869.5	-2.2	-393.1	393.0	0.00	0.00	
3,000.0	9.15	269.69	2,968.2	-2.2	-409.0	408.9	0.00	0.00	
3,100.0	9.15	269.69	3,067.0	-2.3	-424.9	424.8	0.00	0.00	
3,200.0	9.15	269.69	3,165.7	-2.4	-440.8	440.7	0.00	0.00	
3,300.0	9.15	269.69	3,264.4	-2.5	-456.7	456.6	0.00	0.00	
3,400.0	9.15	269.69	3,363.2	-2.6	-472.6	472.5	0.00	0.00	
3,500.0	9.15	269.69	3,461.9	-2.7	-488.5	488.4	0.00	0.00	
3,600.0	9.15	269.69	3,560.6	-2.8	-504.4	504.3	0.00	0.00	
3,700.0	9.15	269.69	3,659.3	-2.8	-520.3	520.2	0.00	0.00	
3,800.0	9.15	269.69	3,758.1	-2.9	-536.2	536.1	0.00	0.00	
3,900.0	9.15	269.69	3,856.8	-3.0	-552.1	552.0	0.00	0.00	
4,000.0	9.15	269.69	3,955.5	-3.1	-568.0	567.9	0.00	0.00	
4,100.0	9.15	269.69	4,054.2	-3.2	-583.9	583.8	0.00	0.00	
4,200.0	9.15	269.69	4,153.0	-3.3	-599.8	599.7	0.00	0.00	
4,300.0	9.15	269.69	4,251.7	-3.4	-615.7	615.6	0.00	0.00	
4,400.0	9.15	269.69	4,350.4	-3.5	-631.6	631.5	0.00	0.00	
4,500.0	9.15	269.69	4,449.2	-3.5	-647.5	647.4	0.00	0.00	
4,600.0	9.15	269.69	4,547.9	-3.6	-663.4	663.3	0.00	0.00	
4,700.0	9.15	269.69	4,646.6	-3.7	-679.3	679.2	0.00	0.00	
4,800.0	9.15	269.69	4,745.3	-3.8	-695.2	695.1	0.00	0.00	
4,900.0	9.15	269.69	4,844.1	-3.9	-711.1	711.0	0.00	0.00	
5,000.0	9.15	269.69	4,942.8	-4.0	-727.1	726.9	0.00	0.00	
5,100.0	9.15	269.69	5,041.5	-4.1	-743.0	742.8	0.00	0.00	
5,155.2	9.15	269.69	5,096.0	-4.1	-751.7	751.6	0.00	0.00	Fort Union
5,200.0	9.15	269.69	5,140.2	-4.2	-758.9	758.7	0.00	0.00	
5,300.0	9.15	269.69	5,239.0	-4.2	-774.8	774.6	0.00	0.00	
5,400.0	9.15	269.69	5,337.7	-4.3	-790.7	790.5	0.00	0.00	
5,500.0	9.15	269.69	5,436.4	-4.4	-806.6	806.4	0.00	0.00	
5,600.0	9.15	269.69	5,535.2	-4.5	-822.5	822.3	0.00	0.00	
5,700.0	9.15	269.69	5,633.9	-4.6	-838.4	838.2	0.00	0.00	
5,800.0	9.15	269.69	5,732.6	-4.7	-854.3	854.1	0.00	0.00	
5,900.0	9.15	269.69	5,831.3	-4.8	-870.2	870.0	0.00	0.00	
6,000.0	9.15	269.69	5,930.1	-4.9	-886.1	885.9	0.00	0.00	
6,100.0	9.15	269.69	6,028.8	-4.9	-902.0	901.8	0.00	0.00	
6,200.0	9.15	269.69	6,127.5	-5.0	-917.9	917.7	0.00	0.00	
6,300.0	9.15	269.69	6,226.2	-5.1	-933.8	933.6	0.00	0.00	
6,400.0	9.15	269.69	6,325.0	-5.2	-949.7	949.5	0.00	0.00	
6,500.0	9.15	269.69	6,423.7	-5.3	-965.6	965.4	0.00	0.00	
6,516.9	9.15	269.69	6,440.4	-5.3	-968.3	968.1	0.00	0.00	Start Drop -2.00
6,573.1	8.03	269.69	6,496.0	-5.3	-976.7	976.5	2.00	-2.00	Ohio Creek
6,600.0	7.49	269.69	6,522.6	-5.4	-980.3	980.1	2.00	-2.00	
6,700.0	5.49	269.69	6,622.0	-5.4	-991.6	991.4	2.00	-2.00	
6,774.3	4.00	269.69	6,696.0	-5.5	-997.8	997.6	2.00	-2.00	Williams Fork
6,800.0	3.49	269.69	6,721.6	-5.5	-999.4	999.3	2.00	-2.00	
6,900.0	1.49	269.69	6,821.6	-5.5	-1,003.8	1,003.6	2.00	-2.00	
6,974.5	0.00	0.00	6,896.0	-5.5	-1,004.7	1,004.6	2.00	-2.00	EOD; Inc=0° - Approx TOG - OM02C B21 696 T
7,000.0	0.06	240.02	6,921.5	-5.5	-1,004.8	1,004.6	0.25	0.25	

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C 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	0.31	240.02	7,021.5	-5.7	-1,005.0	1,004.9	0.25	0.25	
7,200.0	0.56	240.02	7,121.5	-6.1	-1,005.7	1,005.6	0.25	0.25	
7,300.0	0.81	240.02	7,221.5	-6.7	-1,006.8	1,006.6	0.25	0.25	
7,303.2	0.82	240.02	7,224.8	-6.7	-1,006.8	1,006.7	0.25	0.25	
7,400.0	0.82	240.02	7,321.5	-7.4	-1,008.0	1,007.9	0.00	0.00	
7,500.0	0.82	240.02	7,421.5	-8.1	-1,009.2	1,009.1	0.00	0.00	
7,600.0	0.82	240.02	7,521.5	-8.8	-1,010.5	1,010.4	0.00	0.00	
7,700.0	0.82	240.02	7,621.5	-9.5	-1,011.7	1,011.7	0.00	0.00	
7,800.0	0.82	240.02	7,721.5	-10.2	-1,013.0	1,012.9	0.00	0.00	
7,900.0	0.82	240.02	7,821.5	-11.0	-1,014.2	1,014.2	0.00	0.00	
8,000.0	0.82	240.02	7,921.5	-11.7	-1,015.5	1,015.4	0.00	0.00	
8,100.0	0.82	240.02	8,021.4	-12.4	-1,016.7	1,016.7	0.00	0.00	
8,200.0	0.82	240.02	8,121.4	-13.1	-1,017.9	1,018.0	0.00	0.00	
8,300.0	0.82	240.02	8,221.4	-13.8	-1,019.2	1,019.2	0.00	0.00	
8,400.0	0.82	240.02	8,321.4	-14.5	-1,020.4	1,020.5	0.00	0.00	
8,500.0	0.82	240.02	8,421.4	-15.3	-1,021.7	1,021.7	0.00	0.00	
8,600.0	0.82	240.02	8,521.4	-16.0	-1,022.9	1,023.0	0.00	0.00	
8,700.0	0.82	240.02	8,621.4	-16.7	-1,024.1	1,024.3	0.00	0.00	
8,800.0	0.82	240.02	8,721.4	-17.4	-1,025.4	1,025.5	0.00	0.00	
8,900.0	0.82	240.02	8,821.4	-18.1	-1,026.6	1,026.8	0.00	0.00	
9,000.0	0.82	240.02	8,921.4	-18.8	-1,027.9	1,028.0	0.00	0.00	
9,100.0	0.82	240.02	9,021.3	-19.6	-1,029.1	1,029.3	0.00	0.00	
9,200.0	0.82	240.02	9,121.3	-20.3	-1,030.4	1,030.5	0.00	0.00	
9,300.0	0.82	240.02	9,221.3	-21.0	-1,031.6	1,031.8	0.00	0.00	
9,400.0	0.82	240.02	9,321.3	-21.7	-1,032.8	1,033.1	0.00	0.00	
9,424.7	0.82	240.02	9,346.0	-21.9	-1,033.2	1,033.4	0.00	0.00	Cameo
9,500.0	0.82	240.02	9,421.3	-22.4	-1,034.1	1,034.3	0.00	0.00	
9,600.0	0.82	240.02	9,521.3	-23.1	-1,035.3	1,035.6	0.00	0.00	
9,700.0	0.82	240.02	9,621.3	-23.9	-1,036.6	1,036.8	0.00	0.00	
9,774.7	0.82	240.02	9,696.0	-24.4	-1,037.5	1,037.8	0.00	0.00	Rollins SS
9,800.0	0.82	240.02	9,721.3	-24.6	-1,037.8	1,038.1	0.00	0.00	
9,900.0	0.82	240.02	9,821.3	-25.3	-1,039.1	1,039.4	0.00	0.00	
9,924.7	0.82	240.02	9,846.0	-25.5	-1,039.4	1,039.7	0.00	0.00	TD at 9924.7 - OM02C 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
OM02C B21 696 TGT - plan hits target center - Point	0.00	0.00	6,896.0	-5.5	-1,004.7	1,622,598.65	2,263,096.16	39.513716	-108.112311
OM02C B21 696 BHL - plan hits target center - Rectangle (sides W50.0 H100.0 D0.0)	0.00	0.00	9,846.0	-25.5	-1,039.4	1,622,579.68	2,263,060.99	39.513661	-108.112434

Database:	EDM 5000.1 US Multi Users DB	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C B21 696	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,521.7	2,496.0	Wasatch		0.00	
5,155.2	5,096.0	Fort Union		0.00	
6,573.1	6,496.0	Ohio Creek		0.00	
6,774.3	6,696.0	Williams Fork		0.00	
6,974.5	6,896.0	Approx TOG		0.00	
9,424.7	9,346.0	Cameo		0.00	
9,774.7	9,696.0	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
657.5	655.6	-0.2	-36.5	EOB; Inc=9.15°
6,516.9	6,440.4	-5.3	-968.3	Start Drop -2.00
6,974.5	6,896.0	-5.5	-1,004.7	EOD; Inc=0°
9,924.7	9,846.0	-25.5	-1,039.4	TD at 9924.7

Berry Petroleum Company (NAD 83)

Garfield County
NENE S21-T6S-R96W (B21 696 Pad)
OM02C 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 OM02C 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:	OM02C B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Plan #1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,399.5ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 12/1/2010

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	9,924.7	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	2,182.8	2,211.6	135.5	123.7	11.546	CC
OM02B B21 696 - DD - Plan #1	2,500.0	2,528.3	136.9	122.4	9.425	ES
OM02B B21 696 - DD - Plan #1	9,924.7	9,976.7	308.9	257.1	5.964	SF
OM02D B21 696 - DD - Plan #1	491.5	491.0	26.1	24.4	15.080	CC
OM02D B21 696 - DD - Plan #1	500.0	499.5	26.2	24.4	14.798	ES
OM02D B21 696 - DD - Plan #1	9,924.7	9,927.0	381.8	334.9	8.140	SF
OM07A B21 696 - DD - Plan #1	525.1	524.2	35.0	33.1	18.609	CC, ES
OM07A B21 696 - DD - Plan #1	9,924.7	9,911.7	633.8	584.7	12.905	SF
OM07B B21 696 - DD - Plan #1	486.4	484.8	45.9	44.2	26.864	CC
OM07B B21 696 - DD - Plan #1	500.0	498.2	45.9	44.2	26.052	ES
OM07B B21 696 - DD - Plan #1	9,924.7	9,951.6	921.5	871.4	18.390	SF
OM07C B21 696 - DD - Plan #1	385.0	383.0	68.3	67.0	52.326	CC
OM07C B21 696 - DD - Plan #1	400.0	397.6	68.3	67.0	50.255	ES
OM07C B21 696 - DD - Plan #1	9,924.7	9,998.7	1,231.3	1,181.3	24.598	SF
OM07D B21 696 - DD - Plan #1	338.4	337.2	59.4	58.3	52.033	CC, ES
OM07D B21 696 - DD - Plan #1	700.0	688.2	85.0	82.3	31.819	SF
OM08B B21 696 - DD - Plan #1	439.1	438.8	17.4	15.9	11.434	CC, ES
OM08B B21 696 - DD - Plan #1	500.0	499.5	18.3	16.6	10.421	SF
OM08C B21 696 - DD - Plan #1	330.6	330.5	9.1	7.9	8.145	CC, ES
OM08C B21 696 - DD - Plan #1	400.0	399.5	10.7	9.3	7.834	SF
OM08D B21 696 - DD - Plan #1	234.9	235.0	9.8	9.0	12.720	CC, ES
OM08D B21 696 - DD - Plan #1	300.0	300.1	10.1	9.1	10.120	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C 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	83.98	17.1	162.5	163.4				
100.0	100.0	100.0	100.0	0.1	0.1	83.98	17.1	162.5	163.4	163.1	0.30	550.735	
200.0	200.0	200.0	200.0	0.3	0.3	83.98	17.1	162.5	163.4	162.8	0.65	253.040	
300.0	300.0	305.7	305.7	0.5	0.5	174.15	17.5	160.6	163.4	162.4	1.01	162.573	
400.0	399.8	411.4	411.2	0.7	0.7	173.70	18.8	154.9	163.4	162.0	1.37	119.578	
500.0	499.5	517.1	516.4	0.9	1.0	172.94	20.9	145.4	163.3	161.6	1.73	94.302	
576.6	575.6	598.0	596.8	1.1	1.2	172.17	23.0	135.5	163.3	161.3	2.02	80.935	
600.0	598.7	622.7	621.2	1.2	1.3	171.89	23.8	132.1	163.3	161.2	2.11	77.513	
700.0	697.5	728.2	725.3	1.5	1.6	170.53	27.5	115.1	163.1	160.6	2.50	65.211	
800.0	796.2	831.5	826.5	1.8	2.0	168.73	31.8	95.0	160.3	157.4	2.92	54.951	
900.0	895.0	931.3	924.2	2.1	2.4	166.82	36.2	74.9	157.1	153.7	3.35	46.894	
1,000.0	993.7	1,031.2	1,021.8	2.4	2.8	164.83	40.6	54.8	154.0	150.2	3.81	40.457	
1,100.0	1,092.4	1,131.0	1,119.5	2.8	3.2	162.77	45.0	34.8	151.2	146.9	4.29	35.215	
1,200.0	1,191.2	1,230.8	1,217.2	3.1	3.6	160.63	49.3	14.7	148.5	143.7	4.81	30.882	
1,300.0	1,289.9	1,330.6	1,314.8	3.4	4.0	158.41	53.7	-5.4	146.1	140.7	5.36	27.260	
1,400.0	1,388.6	1,430.4	1,412.5	3.7	4.4	156.12	58.1	-25.5	143.9	137.9	5.94	24.207	
1,500.0	1,487.3	1,530.2	1,510.2	4.1	4.8	153.77	62.5	-45.5	141.9	135.3	6.57	21.617	
1,600.0	1,586.1	1,630.0	1,607.8	4.4	5.2	151.35	66.8	-65.6	140.2	133.0	7.22	19.409	
1,700.0	1,684.8	1,729.8	1,705.5	4.7	5.6	148.88	71.2	-85.7	138.7	130.8	7.92	17.520	
1,800.0	1,783.5	1,829.6	1,803.2	5.1	6.0	146.36	75.6	-105.8	137.5	128.9	8.65	15.901	
1,900.0	1,882.2	1,929.4	1,900.8	5.4	6.4	143.80	80.0	-125.9	136.6	127.2	9.41	14.511	
2,000.0	1,981.0	2,029.2	1,998.5	5.7	6.8	141.22	84.3	-145.9	135.9	125.7	10.21	13.315	
2,100.0	2,079.7	2,129.0	2,096.2	6.0	7.2	138.61	88.7	-166.0	135.5	124.5	11.03	12.287	
2,182.8	2,161.4	2,211.6	2,177.0	6.3	7.5	136.44	92.3	-182.6	135.5	123.7	11.73	11.546 CC	
2,200.0	2,178.4	2,228.8	2,193.9	6.4	7.6	135.99	93.1	-186.1	135.5	123.6	11.88	11.403	
2,300.0	2,277.2	2,328.6	2,291.5	6.7	8.0	133.37	97.5	-206.2	135.6	122.9	12.75	10.642	
2,400.0	2,375.9	2,428.5	2,389.2	7.0	8.4	130.77	101.8	-226.2	136.1	122.5	13.63	9.988	
2,500.0	2,474.6	2,528.3	2,486.9	7.4	8.8	128.19	106.2	-246.3	136.9	122.4	14.52	9.425 ES	
2,600.0	2,573.3	2,628.1	2,584.5	7.7	9.2	125.65	110.6	-266.4	137.9	122.5	15.42	8.942	
2,700.0	2,672.1	2,727.9	2,682.2	8.0	9.6	123.14	115.0	-286.5	139.2	122.9	16.32	8.528	
2,800.0	2,770.8	2,827.7	2,779.9	8.4	10.0	120.69	119.3	-306.6	140.8	123.5	17.22	8.174	
2,900.0	2,869.5	2,927.5	2,877.5	8.7	10.4	118.29	123.7	-326.6	142.6	124.5	18.11	7.871	
3,000.0	2,968.2	3,027.3	2,975.2	9.0	10.8	115.96	128.1	-346.7	144.6	125.6	19.00	7.612	
3,100.0	3,067.0	3,127.1	3,072.9	9.3	11.2	113.70	132.5	-366.8	146.9	127.0	19.87	7.393	
3,200.0	3,165.7	3,226.9	3,170.5	9.7	11.6	111.51	136.9	-386.9	149.4	128.7	20.73	7.207	
3,300.0	3,264.4	3,326.7	3,268.2	10.0	12.0	109.39	141.2	-406.9	152.1	130.6	21.58	7.051	
3,400.0	3,363.2	3,426.5	3,365.9	10.3	12.4	107.36	145.6	-427.0	155.1	132.7	22.41	6.920	
3,500.0	3,461.9	3,526.3	3,463.6	10.7	12.8	105.40	150.0	-447.1	158.2	135.0	23.22	6.811	
3,600.0	3,560.6	3,626.1	3,561.2	11.0	13.2	103.51	154.4	-467.2	161.5	137.4	24.02	6.722	
3,700.0	3,659.3	3,726.0	3,658.9	11.3	13.6	101.71	158.7	-487.3	164.9	140.1	24.80	6.650	
3,800.0	3,758.1	3,825.8	3,756.6	11.7	14.0	99.98	163.1	-507.3	168.5	143.0	25.57	6.592	
3,900.0	3,856.8	3,925.6	3,854.2	12.0	14.5	98.32	167.5	-527.4	172.3	146.0	26.32	6.547	
4,000.0	3,955.5	4,025.4	3,951.9	12.3	14.9	96.73	171.9	-547.5	176.2	149.2	27.05	6.514	
4,100.0	4,054.2	4,125.2	4,049.6	12.6	15.3	95.22	176.2	-567.6	180.2	152.5	27.77	6.490	
4,200.0	4,153.0	4,225.0	4,147.2	13.0	15.7	93.77	180.6	-587.6	184.4	155.9	28.48	6.475	
4,300.0	4,251.7	4,324.8	4,244.9	13.3	16.1	92.39	185.0	-607.7	188.6	159.5	29.17	6.467	
4,400.0	4,350.4	4,424.6	4,342.6	13.6	16.5	91.06	189.4	-627.8	193.0	163.2	29.85	6.466	
4,500.0	4,449.2	4,524.4	4,440.2	14.0	16.9	89.80	193.7	-647.9	197.5	167.0	30.52	6.470	
4,600.0	4,547.9	4,624.2	4,537.9	14.3	17.3	88.60	198.1	-667.9	202.0	170.9	31.18	6.479	
4,700.0	4,646.6	4,724.0	4,635.6	14.6	17.7	87.44	202.5	-688.0	206.7	174.9	31.83	6.493	
4,800.0	4,745.3	4,823.8	4,733.3	15.0	18.1	86.34	206.9	-708.1	211.4	178.9	32.47	6.510	
4,900.0	4,844.1	4,923.6	4,830.9	15.3	18.5	85.29	211.2	-728.2	216.2	183.1	33.10	6.531	

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 OM02C 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:	OM02C 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
5,000.0	4,942.8	5,023.5	4,928.6	15.6	18.9	84.28	215.6	-748.3	221.1	187.3	33.73	6.554	
5,100.0	5,041.5	5,123.3	5,026.3	16.0	19.3	83.32	220.0	-768.3	226.0	191.7	34.35	6.580	
5,200.0	5,140.2	5,223.1	5,123.9	16.3	19.7	82.39	224.4	-788.4	231.0	196.0	34.96	6.608	
5,300.0	5,239.0	5,322.9	5,221.6	16.6	20.1	81.51	228.7	-808.5	236.1	200.5	35.56	6.638	
5,400.0	5,337.7	5,422.7	5,319.3	16.9	20.5	80.66	233.1	-828.6	241.2	205.0	36.16	6.669	
5,500.0	5,436.4	5,522.5	5,416.9	17.3	20.9	79.85	237.5	-848.6	246.3	209.6	36.75	6.702	
5,600.0	5,535.2	5,622.3	5,514.6	17.6	21.3	79.08	241.9	-868.7	251.5	214.2	37.34	6.735	
5,700.0	5,633.9	5,722.1	5,612.3	17.9	21.7	78.33	246.2	-888.8	256.8	218.8	37.93	6.770	
5,800.0	5,732.6	5,821.9	5,709.9	18.3	22.1	77.61	250.6	-908.9	262.1	223.5	38.51	6.805	
5,900.0	5,831.3	5,921.7	5,807.6	18.6	22.5	76.93	255.0	-929.0	267.4	228.3	39.09	6.841	
6,000.0	5,930.1	6,021.5	5,905.3	18.9	23.0	76.27	259.4	-949.0	272.7	233.1	39.66	6.877	
6,100.0	6,028.8	6,121.3	6,003.0	19.3	23.4	75.63	263.7	-969.1	278.1	237.9	40.23	6.914	
6,200.0	6,127.5	6,221.1	6,100.6	19.6	23.8	75.02	268.1	-989.2	283.6	242.8	40.80	6.951	
6,300.0	6,226.2	6,320.9	6,198.3	19.9	24.2	74.43	272.5	-1,009.3	289.0	247.7	41.36	6.988	
6,400.0	6,325.0	6,420.8	6,296.0	20.3	24.6	73.87	276.9	-1,029.3	294.5	252.6	41.93	7.025	
6,500.0	6,423.7	6,525.1	6,398.3	20.6	25.0	73.53	281.2	-1,049.0	299.4	256.9	42.51	7.043	
6,600.0	6,522.6	6,630.3	6,502.3	20.9	25.3	73.65	284.7	-1,065.2	302.9	259.8	43.11	7.027	
6,700.0	6,622.0	6,735.7	6,606.8	21.1	25.5	73.75	287.4	-1,077.6	305.6	262.0	43.59	7.010	
6,800.0	6,721.6	6,841.1	6,711.9	21.3	25.7	73.81	289.3	-1,086.3	307.5	263.5	43.97	6.993	
6,900.0	6,821.6	6,946.6	6,817.2	21.4	25.8	73.83	290.4	-1,091.2	308.5	264.3	44.24	6.974	
7,000.0	6,921.5	7,051.0	6,921.6	21.5	25.9	103.48	290.6	-1,092.5	308.8	264.4	44.44	6.950	
7,100.0	7,021.5	7,151.3	7,021.9	21.6	26.0	103.48	290.5	-1,092.7	308.8	264.2	44.65	6.918	
7,200.0	7,121.5	7,251.6	7,122.2	21.8	26.1	103.49	290.1	-1,093.4	308.8	264.0	44.87	6.883	
7,300.0	7,221.5	7,351.9	7,222.5	21.9	26.2	103.49	289.5	-1,094.4	308.9	263.7	45.10	6.848	
7,400.0	7,321.5	7,451.9	7,322.6	22.0	26.3	103.49	288.8	-1,095.6	308.9	263.5	45.34	6.812	
7,500.0	7,421.5	7,551.9	7,422.5	22.1	26.4	103.49	288.1	-1,096.9	308.9	263.3	45.58	6.776	
7,600.0	7,521.5	7,651.9	7,522.5	22.2	26.5	103.49	287.4	-1,098.1	308.9	263.0	45.82	6.740	
7,700.0	7,621.5	7,751.9	7,622.5	22.4	26.6	103.49	286.6	-1,099.4	308.9	262.8	46.07	6.705	
7,800.0	7,721.5	7,851.9	7,722.5	22.5	26.7	103.49	285.9	-1,100.6	308.9	262.5	46.31	6.669	
7,900.0	7,821.5	7,951.9	7,822.5	22.6	26.8	103.49	285.2	-1,101.9	308.9	262.3	46.56	6.634	
8,000.0	7,921.5	8,051.9	7,922.5	22.7	27.0	103.49	284.5	-1,103.1	308.9	262.1	46.80	6.599	
8,100.0	8,021.4	8,151.9	8,022.5	22.8	27.1	103.49	283.8	-1,104.3	308.9	261.8	47.05	6.564	
8,200.0	8,121.4	8,251.9	8,122.5	23.0	27.2	103.49	283.1	-1,105.6	308.9	261.6	47.30	6.530	
8,300.0	8,221.4	8,351.9	8,222.5	23.1	27.3	103.49	282.3	-1,106.8	308.9	261.3	47.55	6.495	
8,400.0	8,321.4	8,451.9	8,322.4	23.2	27.4	103.49	281.6	-1,108.1	308.9	261.1	47.80	6.461	
8,500.0	8,421.4	8,551.9	8,422.4	23.4	27.5	103.49	280.9	-1,109.3	308.9	260.8	48.06	6.427	
8,600.0	8,521.4	8,651.9	8,522.4	23.5	27.6	103.49	280.2	-1,110.6	308.9	260.6	48.31	6.393	
8,700.0	8,621.4	8,751.9	8,622.4	23.6	27.7	103.49	279.5	-1,111.8	308.9	260.3	48.57	6.360	
8,800.0	8,721.4	8,851.9	8,722.4	23.7	27.8	103.49	278.8	-1,113.1	308.9	260.0	48.82	6.326	
8,900.0	8,821.4	8,951.9	8,822.4	23.9	27.9	103.49	278.0	-1,114.3	308.9	259.8	49.08	6.293	
9,000.0	8,921.4	9,051.9	8,922.4	24.0	28.1	103.49	277.3	-1,115.5	308.9	259.5	49.34	6.260	
9,100.0	9,021.3	9,151.9	9,022.4	24.1	28.2	103.49	276.6	-1,116.8	308.9	259.3	49.60	6.227	
9,200.0	9,121.3	9,251.9	9,122.4	24.3	28.3	103.49	275.9	-1,118.0	308.9	259.0	49.86	6.194	
9,300.0	9,221.3	9,351.9	9,222.4	24.4	28.4	103.49	275.2	-1,119.3	308.9	258.7	50.13	6.162	
9,400.0	9,321.3	9,451.9	9,322.3	24.5	28.5	103.49	274.5	-1,120.5	308.9	258.5	50.39	6.130	
9,500.0	9,421.3	9,551.9	9,422.3	24.7	28.6	103.49	273.7	-1,121.8	308.9	258.2	50.65	6.098	
9,600.0	9,521.3	9,651.9	9,522.3	24.8	28.7	103.49	273.0	-1,123.0	308.9	258.0	50.92	6.066	
9,700.0	9,621.3	9,751.9	9,622.3	24.9	28.9	103.49	272.3	-1,124.3	308.9	257.7	51.19	6.034	
9,800.0	9,721.3	9,851.9	9,722.3	25.1	29.0	103.49	271.6	-1,125.5	308.9	257.4	51.46	6.003	
9,900.0	9,821.3	9,951.9	9,822.3	25.2	29.1	103.49	270.9	-1,126.7	308.9	257.2	51.72	5.972	
9,924.7	9,846.0	9,976.7	9,847.0	25.2	29.1	103.49	270.7	-1,127.0	308.9	257.1	51.79	5.964	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C 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	-150.78	-26.2	-14.7	30.1				
100.0	100.0	100.0	100.0	0.1	0.1	-150.78	-26.2	-14.7	30.1	29.8	0.30	101.279	
200.0	200.0	200.0	200.0	0.3	0.3	-150.78	-26.2	-14.7	30.1	29.4	0.65	46.534	
300.0	300.0	300.0	300.0	0.5	0.5	-63.45	-26.2	-14.7	29.2	28.2	1.00	29.296	
400.0	399.8	399.8	399.8	0.7	0.7	-73.35	-26.2	-14.7	27.3	25.9	1.37	19.981	
491.5	491.0	491.0	491.0	0.9	0.8	-90.00	-26.2	-14.7	26.1	24.4	1.73	15.080	CC
500.0	499.5	499.5	499.5	0.9	0.8	-91.92	-26.2	-14.7	26.2	24.4	1.77	14.798	ES
600.0	598.7	598.8	598.7	1.2	1.0	-113.03	-26.8	-16.3	29.1	26.9	2.19	13.321	
700.0	697.5	698.4	698.2	1.5	1.2	-127.35	-28.7	-21.1	36.1	33.5	2.59	13.922	
800.0	796.2	798.5	798.0	1.8	1.4	-133.14	-31.8	-29.2	43.5	40.5	3.02	14.416	
900.0	895.0	899.0	897.7	2.1	1.7	-133.59	-36.2	-40.5	49.8	46.3	3.51	14.206	
1,000.0	993.7	999.5	996.9	2.4	1.9	-130.55	-41.9	-55.2	54.8	50.7	4.08	13.418	
1,100.0	1,092.4	1,099.8	1,095.4	2.8	2.3	-124.76	-48.8	-73.0	59.0	54.2	4.78	12.335	
1,200.0	1,191.2	1,199.5	1,192.9	3.1	2.7	-118.13	-56.3	-92.5	63.4	57.8	5.53	11.453	
1,300.0	1,289.9	1,299.1	1,290.3	3.4	3.0	-112.42	-63.9	-111.9	68.5	62.2	6.29	10.889	
1,400.0	1,388.6	1,398.8	1,387.8	3.7	3.4	-107.54	-71.4	-131.4	74.2	67.2	7.04	10.542	
1,500.0	1,487.3	1,498.4	1,485.2	4.1	3.8	-103.38	-78.9	-150.9	80.4	72.6	7.78	10.339	
1,600.0	1,586.1	1,598.1	1,582.7	4.4	4.2	-99.84	-86.4	-170.3	87.0	78.5	8.50	10.233	
1,700.0	1,684.8	1,697.7	1,680.1	4.7	4.6	-96.79	-94.0	-189.8	93.8	84.6	9.20	10.191	
1,800.0	1,783.5	1,797.4	1,777.6	5.1	5.0	-94.17	-101.5	-209.2	100.9	91.0	9.90	10.192	
1,900.0	1,882.2	1,897.0	1,875.0	5.4	5.4	-91.89	-109.0	-228.7	108.1	97.5	10.58	10.221	
2,000.0	1,981.0	1,996.7	1,972.4	5.7	5.8	-89.91	-116.5	-248.1	115.5	104.3	11.25	10.268	
2,100.0	2,079.7	2,096.3	2,069.9	6.0	6.2	-88.16	-124.1	-267.6	123.0	111.1	11.91	10.327	
2,200.0	2,178.4	2,196.0	2,167.3	6.4	6.6	-86.61	-131.6	-287.1	130.6	118.1	12.57	10.394	
2,300.0	2,277.2	2,295.6	2,264.8	6.7	7.0	-85.24	-139.1	-306.5	138.3	125.1	13.22	10.465	
2,400.0	2,375.9	2,395.3	2,362.2	7.0	7.4	-84.01	-146.7	-326.0	146.1	132.2	13.87	10.538	
2,500.0	2,474.6	2,494.9	2,459.7	7.4	7.8	-82.90	-154.2	-345.4	153.9	139.4	14.51	10.611	
2,600.0	2,573.3	2,594.6	2,557.1	7.7	8.2	-81.91	-161.7	-364.9	161.8	146.7	15.15	10.685	
2,700.0	2,672.1	2,694.2	2,654.5	8.0	8.6	-81.00	-169.2	-384.3	169.7	154.0	15.78	10.757	
2,800.0	2,770.8	2,793.9	2,752.0	8.4	9.0	-80.18	-176.8	-403.8	177.7	161.3	16.41	10.827	
2,900.0	2,869.5	2,893.5	2,849.4	8.7	9.4	-79.42	-184.3	-423.3	185.7	168.7	17.04	10.896	
3,000.0	2,968.2	2,993.2	2,946.9	9.0	9.8	-78.73	-191.8	-442.7	193.7	176.1	17.67	10.962	
3,100.0	3,067.0	3,092.8	3,044.3	9.3	10.2	-78.10	-199.3	-462.2	201.8	183.5	18.30	11.027	
3,200.0	3,165.7	3,192.5	3,141.7	9.7	10.6	-77.51	-206.9	-481.6	209.9	190.9	18.93	11.089	
3,300.0	3,264.4	3,292.2	3,239.2	10.0	11.0	-76.97	-214.4	-501.1	218.0	198.4	19.55	11.149	
3,400.0	3,363.2	3,391.8	3,336.6	10.3	11.5	-76.46	-221.9	-520.6	226.1	205.9	20.17	11.207	
3,500.0	3,461.9	3,491.5	3,434.1	10.7	11.9	-75.99	-229.5	-540.0	234.2	213.4	20.80	11.263	
3,600.0	3,560.6	3,591.1	3,531.5	11.0	12.3	-75.56	-237.0	-559.5	242.4	220.9	21.42	11.316	
3,700.0	3,659.3	3,690.8	3,629.0	11.3	12.7	-75.15	-244.5	-578.9	250.5	228.5	22.04	11.368	
3,800.0	3,758.1	3,790.4	3,726.4	11.7	13.1	-74.76	-252.0	-598.4	258.7	236.0	22.66	11.417	
3,900.0	3,856.8	3,890.1	3,823.8	12.0	13.5	-74.40	-259.6	-617.8	266.9	243.6	23.28	11.465	
4,000.0	3,955.5	3,989.7	3,921.3	12.3	13.9	-74.06	-267.1	-637.3	275.1	251.2	23.90	11.511	
4,100.0	4,054.2	4,089.4	4,018.7	12.6	14.3	-73.74	-274.6	-656.8	283.3	258.7	24.51	11.555	
4,200.0	4,153.0	4,189.0	4,116.2	13.0	14.7	-73.44	-282.1	-676.2	291.5	266.3	25.13	11.598	
4,300.0	4,251.7	4,288.7	4,213.6	13.3	15.1	-73.16	-289.7	-695.7	299.7	273.9	25.75	11.639	
4,400.0	4,350.4	4,388.3	4,311.1	13.6	15.5	-72.89	-297.2	-715.1	307.9	281.5	26.36	11.679	
4,500.0	4,449.2	4,488.0	4,408.5	14.0	15.9	-72.63	-304.7	-734.6	316.1	289.2	26.98	11.717	
4,600.0	4,547.9	4,588.7	4,507.1	14.3	16.4	-72.40	-312.3	-754.2	324.3	296.7	27.60	11.752	
4,700.0	4,646.6	4,696.1	4,612.5	14.6	16.7	-72.50	-319.5	-772.8	331.1	302.8	28.25	11.719	
4,800.0	4,745.3	4,803.6	4,718.8	15.0	17.0	-73.15	-325.3	-787.7	335.5	306.6	28.96	11.587	
4,900.0	4,844.1	4,910.9	4,825.5	15.3	17.3	-74.32	-329.6	-798.8	337.8	308.1	29.71	11.371	
5,000.0	4,942.8	5,017.8	4,932.1	15.6	17.5	-76.03	-332.4	-806.2	338.0	307.5	30.50	11.084	

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 OM02C 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:	OM02C 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
5,100.0	5,041.5	5,124.0	5,038.2	16.0	17.6	-78.27	-333.8	-809.9	336.5	305.2	31.32	10.746	
5,200.0	5,140.2	5,225.6	5,139.8	16.3	17.7	-80.92	-334.1	-810.4	333.9	301.8	32.13	10.391	
5,300.0	5,239.0	5,323.5	5,237.7	16.6	17.8	-83.51	-334.3	-810.7	332.0	299.1	32.90	10.090	
5,400.0	5,337.7	5,421.9	5,336.1	16.9	17.9	-86.10	-334.7	-811.4	331.0	297.4	33.63	9.842	
5,488.3	5,424.9	5,509.2	5,423.4	17.2	18.0	-88.39	-335.0	-812.1	330.7	296.5	34.24	9.659	
5,500.0	5,436.4	5,520.8	5,435.0	17.3	18.0	-88.70	-335.1	-812.1	330.7	296.4	34.32	9.638	
5,600.0	5,535.2	5,619.6	5,533.8	17.6	18.1	-91.29	-335.5	-812.9	331.1	296.2	34.95	9.474	
5,700.0	5,633.9	5,718.5	5,632.6	17.9	18.2	-93.87	-335.9	-813.6	332.3	296.7	35.54	9.349	
5,800.0	5,732.6	5,817.3	5,731.5	18.3	18.3	-96.44	-336.4	-814.4	334.1	298.0	36.08	9.260	
5,900.0	5,831.3	5,916.1	5,830.3	18.6	18.4	-98.97	-336.8	-815.1	336.6	300.0	36.56	9.205	
6,000.0	5,930.1	6,015.0	5,929.2	18.9	18.5	-101.45	-337.2	-815.8	339.7	302.7	37.00	9.181	
6,100.0	6,028.8	6,113.8	6,028.0	19.3	18.6	-103.89	-337.6	-816.6	343.5	306.1	37.39	9.188	
6,200.0	6,127.5	6,212.7	6,126.8	19.6	18.7	-106.28	-338.1	-817.3	347.9	310.2	37.72	9.222	
6,300.0	6,226.2	6,311.5	6,225.7	19.9	18.8	-108.60	-338.5	-818.0	352.9	314.9	38.02	9.282	
6,400.0	6,325.0	6,410.4	6,324.5	20.3	19.0	-110.85	-338.9	-818.8	358.5	320.2	38.28	9.365	
6,500.0	6,423.7	6,509.2	6,423.4	20.6	19.1	-113.03	-339.3	-819.5	364.6	326.1	38.50	9.471	
6,600.0	6,522.6	6,608.2	6,522.4	20.9	19.2	-115.07	-339.8	-820.3	370.7	332.1	38.67	9.587	
6,700.0	6,622.0	6,707.7	6,621.8	21.1	19.3	-116.59	-340.2	-821.0	375.7	336.9	38.83	9.676	
6,800.0	6,721.6	6,807.4	6,721.5	21.3	19.4	-117.58	-340.6	-821.7	379.3	340.3	39.00	9.727	
6,900.0	6,821.6	6,907.3	6,821.5	21.4	19.5	-118.06	-341.0	-822.5	381.4	342.2	39.19	9.732	
7,000.0	6,921.5	7,007.3	6,921.5	21.5	19.7	-88.41	-341.5	-823.2	381.9	342.5	39.41	9.690	
7,100.0	7,021.5	7,107.3	7,021.4	21.6	19.8	-88.33	-341.9	-824.0	381.9	342.2	39.66	9.630	
7,200.0	7,121.5	7,207.3	7,121.4	21.8	19.9	-88.31	-342.3	-824.7	381.9	342.0	39.90	9.571	
7,300.0	7,221.5	7,307.3	7,221.4	21.9	20.0	-88.37	-342.8	-825.5	381.9	341.7	40.15	9.512	
7,400.0	7,321.5	7,407.3	7,321.4	22.0	20.1	-88.45	-343.2	-826.2	381.9	341.5	40.39	9.455	
7,500.0	7,421.5	7,507.3	7,421.4	22.1	20.3	-88.54	-343.6	-827.0	381.8	341.2	40.63	9.398	
7,600.0	7,521.5	7,607.3	7,521.4	22.2	20.4	-88.62	-344.0	-827.7	381.8	341.0	40.87	9.342	
7,700.0	7,621.5	7,707.3	7,621.4	22.4	20.5	-88.71	-344.5	-828.4	381.8	340.7	41.12	9.286	
7,800.0	7,721.5	7,807.3	7,721.4	22.5	20.6	-88.80	-344.9	-829.2	381.8	340.4	41.36	9.230	
7,900.0	7,821.5	7,907.3	7,821.4	22.6	20.8	-88.88	-345.3	-829.9	381.8	340.2	41.61	9.175	
8,000.0	7,921.5	8,007.3	7,921.4	22.7	20.9	-88.97	-345.8	-830.7	381.8	339.9	41.86	9.120	
8,100.0	8,021.4	8,107.3	8,021.4	22.8	21.0	-89.05	-346.2	-831.4	381.8	339.7	42.11	9.065	
8,200.0	8,121.4	8,207.3	8,121.4	23.0	21.2	-89.14	-346.6	-832.2	381.8	339.4	42.37	9.011	
8,300.0	8,221.4	8,307.3	8,221.4	23.1	21.3	-89.23	-347.1	-832.9	381.8	339.1	42.62	8.957	
8,400.0	8,321.4	8,407.3	8,321.4	23.2	21.4	-89.31	-347.5	-833.7	381.8	338.9	42.87	8.904	
8,500.0	8,421.4	8,507.3	8,421.4	23.4	21.5	-89.40	-347.9	-834.4	381.7	338.6	43.13	8.851	
8,600.0	8,521.4	8,607.3	8,521.4	23.5	21.7	-89.49	-348.3	-835.2	381.7	338.4	43.39	8.798	
8,700.0	8,621.4	8,707.3	8,621.4	23.6	21.8	-89.57	-348.8	-835.9	381.7	338.1	43.65	8.746	
8,800.0	8,721.4	8,807.3	8,721.4	23.7	21.9	-89.66	-349.2	-836.6	381.7	337.8	43.91	8.694	
8,900.0	8,821.4	8,907.3	8,821.4	23.9	22.1	-89.74	-349.6	-837.4	381.7	337.6	44.17	8.643	
9,000.0	8,921.4	9,007.3	8,921.3	24.0	22.2	-89.83	-350.1	-838.1	381.7	337.3	44.43	8.592	
9,100.0	9,021.3	9,107.3	9,021.3	24.1	22.3	-89.92	-350.5	-838.9	381.7	337.0	44.69	8.541	
9,200.0	9,121.3	9,207.3	9,121.3	24.3	22.5	-90.00	-350.9	-839.6	381.7	336.8	44.96	8.491	
9,200.3	9,121.6	9,207.6	9,121.6	24.3	22.5	-90.00	-350.9	-839.6	381.7	336.8	44.96	8.491	
9,300.0	9,221.3	9,307.3	9,221.3	24.4	22.6	-90.09	-351.4	-840.4	381.7	336.5	45.22	8.441	
9,400.0	9,321.3	9,407.3	9,321.3	24.5	22.7	-90.17	-351.8	-841.1	381.7	336.2	45.49	8.392	
9,500.0	9,421.3	9,507.3	9,421.3	24.7	22.9	-90.26	-352.2	-841.9	381.7	336.0	45.76	8.342	
9,600.0	9,521.3	9,607.3	9,521.3	24.8	23.0	-90.35	-352.6	-842.6	381.7	335.7	46.03	8.294	
9,700.0	9,621.3	9,707.3	9,621.3	24.9	23.2	-90.43	-353.1	-843.4	381.7	335.4	46.30	8.246	
9,800.0	9,721.3	9,807.3	9,721.3	25.1	23.3	-90.52	-353.5	-844.1	381.7	335.2	46.57	8.198	
9,900.0	9,821.3	9,907.3	9,821.3	25.2	23.4	-90.61	-353.9	-844.8	381.7	334.9	46.84	8.150	
9,908.8	9,830.0	9,916.0	9,830.0	25.2	23.4	-90.61	-354.0	-844.9	381.7	334.9	46.86	8.146	

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 OM02C 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:	OM02C 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
9,924.7	9,846.0	9,927.0	9,841.0	25.2	23.5	-90.62	-354.0	-845.0	381.8	334.9	46.90	8.140 SF	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design NENE S21-T6S-R96W (B21 696 Pad) - OM07A B21 696 - DD - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-150.54	-35.0	-19.7	40.2				
100.0	100.0	100.0	100.0	0.1	0.1	-150.54	-35.0	-19.7	40.2	39.9	0.30	135.349	
200.0	200.0	200.0	200.0	0.3	0.3	-150.54	-35.0	-19.7	40.2	39.5	0.65	62.187	
300.0	300.0	300.0	300.0	0.5	0.5	-62.45	-35.0	-19.7	39.3	38.3	1.00	39.414	
400.0	399.8	399.8	399.8	0.7	0.7	-69.65	-35.0	-19.7	37.2	35.8	1.36	27.246	
500.0	499.5	499.5	499.5	0.9	0.8	-83.09	-35.0	-19.7	35.1	33.3	1.77	19.876	
525.1	524.4	524.2	524.2	1.0	0.9	-87.36	-35.0	-19.8	35.0	33.1	1.88	18.609	CC, ES
600.0	598.7	598.2	598.2	1.2	1.0	-100.17	-35.9	-21.1	36.4	34.2	2.20	16.529	
700.0	697.5	697.1	697.0	1.5	1.2	-114.20	-38.9	-25.3	42.7	40.0	2.65	16.111	
800.0	796.2	796.4	795.9	1.8	1.4	-121.01	-43.9	-32.2	51.2	48.1	3.11	16.495	
900.0	895.0	895.9	894.6	2.1	1.7	-122.55	-50.9	-41.9	60.4	56.7	3.62	16.688	
1,000.0	993.7	995.3	992.9	2.4	1.9	-120.88	-59.8	-54.4	69.7	65.5	4.20	16.612	
1,100.0	1,092.4	1,094.8	1,091.0	2.8	2.2	-118.78	-69.5	-67.8	79.2	74.4	4.80	16.488	
1,200.0	1,191.2	1,194.3	1,189.1	3.1	2.5	-117.14	-79.1	-81.2	88.8	83.3	5.42	16.373	
1,300.0	1,289.9	1,293.9	1,287.3	3.4	2.8	-115.81	-88.7	-94.5	98.4	92.3	6.05	16.272	
1,400.0	1,388.6	1,393.4	1,385.4	3.7	3.2	-114.73	-98.3	-107.9	108.1	101.4	6.68	16.185	
1,500.0	1,487.3	1,492.9	1,483.6	4.1	3.5	-113.82	-107.9	-121.3	117.8	110.5	7.31	16.110	
1,600.0	1,586.1	1,592.4	1,581.7	4.4	3.8	-113.05	-117.5	-134.7	127.5	119.6	7.95	16.046	
1,700.0	1,684.8	1,691.9	1,679.8	4.7	4.1	-112.38	-127.1	-148.1	137.3	128.7	8.58	15.990	
1,800.0	1,783.5	1,791.4	1,778.0	5.1	4.5	-111.81	-136.7	-161.4	147.0	137.8	9.22	15.941	
1,900.0	1,882.2	1,890.9	1,876.1	5.4	4.8	-111.31	-146.3	-174.8	156.8	146.9	9.86	15.899	
2,000.0	1,981.0	1,990.4	1,974.3	5.7	5.1	-110.87	-156.0	-188.2	166.6	156.1	10.50	15.861	
2,100.0	2,079.7	2,090.0	2,072.4	6.0	5.5	-110.47	-165.6	-201.6	176.4	165.2	11.14	15.828	
2,200.0	2,178.4	2,189.5	2,170.5	6.4	5.8	-110.12	-175.2	-215.0	186.2	174.4	11.79	15.799	
2,300.0	2,277.2	2,289.0	2,268.7	6.7	6.1	-109.80	-184.8	-228.4	196.0	183.6	12.43	15.772	
2,400.0	2,375.9	2,388.5	2,366.8	7.0	6.5	-109.52	-194.4	-241.7	205.8	192.8	13.07	15.748	
2,500.0	2,474.6	2,488.0	2,464.9	7.4	6.8	-109.26	-204.0	-255.1	215.7	201.9	13.71	15.727	
2,600.0	2,573.3	2,587.5	2,563.1	7.7	7.1	-109.02	-213.6	-268.5	225.5	211.1	14.36	15.707	
2,700.0	2,672.1	2,687.0	2,661.2	8.0	7.5	-108.80	-223.2	-281.9	235.3	220.3	15.00	15.690	
2,800.0	2,770.8	2,786.5	2,759.4	8.4	7.8	-108.60	-232.8	-295.3	245.1	229.5	15.64	15.673	
2,900.0	2,869.5	2,886.0	2,857.5	8.7	8.1	-108.41	-242.4	-308.6	255.0	238.7	16.28	15.658	
3,000.0	2,968.2	2,985.6	2,955.6	9.0	8.5	-108.24	-252.1	-322.0	264.8	247.9	16.93	15.645	
3,100.0	3,067.0	3,085.1	3,053.8	9.3	8.8	-108.08	-261.7	-335.4	274.7	257.1	17.57	15.632	
3,200.0	3,165.7	3,184.6	3,151.9	9.7	9.1	-107.94	-271.3	-348.8	284.5	266.3	18.21	15.620	
3,300.0	3,264.4	3,284.1	3,250.1	10.0	9.5	-107.80	-280.9	-362.2	294.3	275.5	18.86	15.609	
3,400.0	3,363.2	3,383.6	3,348.2	10.3	9.8	-107.67	-290.5	-375.5	304.2	284.7	19.50	15.599	
3,500.0	3,461.9	3,483.1	3,446.3	10.7	10.1	-107.55	-300.1	-388.9	314.0	293.9	20.14	15.589	
3,600.0	3,560.6	3,582.6	3,544.5	11.0	10.5	-107.43	-309.7	-402.3	323.9	303.1	20.79	15.581	
3,700.0	3,659.3	3,682.1	3,642.6	11.3	10.8	-107.33	-319.3	-415.7	333.7	312.3	21.43	15.572	
3,800.0	3,758.1	3,781.7	3,740.7	11.7	11.2	-107.23	-328.9	-429.1	343.6	321.5	22.08	15.564	
3,900.0	3,856.8	3,881.2	3,838.9	12.0	11.5	-107.13	-338.5	-442.5	353.4	330.7	22.72	15.557	
4,000.0	3,955.5	3,980.7	3,937.0	12.3	11.8	-107.04	-348.2	-455.8	363.3	339.9	23.36	15.550	
4,100.0	4,054.2	4,080.2	4,035.2	12.6	12.2	-106.96	-357.8	-469.2	373.2	349.1	24.01	15.544	
4,200.0	4,153.0	4,179.7	4,133.3	13.0	12.5	-106.87	-367.4	-482.6	383.0	358.4	24.65	15.537	
4,300.0	4,251.7	4,279.2	4,231.4	13.3	12.8	-106.80	-377.0	-496.0	392.9	367.6	25.29	15.531	
4,400.0	4,350.4	4,378.7	4,329.6	13.6	13.2	-106.72	-386.6	-509.4	402.7	376.8	25.94	15.526	
4,500.0	4,449.2	4,478.2	4,427.7	14.0	13.5	-106.65	-396.2	-522.7	412.6	386.0	26.58	15.521	
4,600.0	4,547.9	4,577.7	4,525.9	14.3	13.9	-106.59	-405.8	-536.1	422.4	395.2	27.23	15.516	
4,700.0	4,646.6	4,677.3	4,624.0	14.6	14.2	-106.52	-415.4	-549.5	432.3	404.4	27.87	15.511	
4,800.0	4,745.3	4,776.8	4,722.1	15.0	14.5	-106.46	-425.0	-562.9	442.1	413.6	28.51	15.506	
4,900.0	4,844.1	4,876.3	4,820.3	15.3	14.9	-106.41	-434.7	-576.3	452.0	422.8	29.16	15.502	
5,000.0	4,942.8	4,975.8	4,918.4	15.6	15.2	-106.35	-444.3	-589.7	461.9	432.1	29.80	15.498	

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 OM02C 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:	OM02C 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
5,100.0	5,041.5	5,075.3	5,016.5	16.0	15.5	-106.30	-453.9	-603.0	471.7	441.3	30.45	15.494	
5,200.0	5,140.2	5,174.8	5,114.7	16.3	15.9	-106.25	-463.5	-616.4	481.6	450.5	31.09	15.490	
5,300.0	5,239.0	5,274.3	5,212.8	16.6	16.2	-106.20	-473.1	-629.8	491.4	459.7	31.73	15.486	
5,400.0	5,337.7	5,373.8	5,311.0	16.9	16.5	-106.15	-482.7	-643.2	501.3	468.9	32.38	15.483	
5,500.0	5,436.4	5,473.4	5,409.1	17.3	16.9	-106.11	-492.3	-656.6	511.2	478.1	33.02	15.480	
5,600.0	5,535.2	5,572.9	5,507.2	17.6	17.2	-106.06	-501.9	-669.9	521.0	487.4	33.67	15.476	
5,700.0	5,633.9	5,672.4	5,605.4	17.9	17.6	-106.02	-511.5	-683.3	530.9	496.6	34.31	15.473	
5,800.0	5,732.6	5,771.9	5,703.5	18.3	17.9	-105.98	-521.1	-696.7	540.8	505.8	34.95	15.470	
5,900.0	5,831.3	5,871.4	5,801.7	18.6	18.2	-105.94	-530.8	-710.1	550.6	515.0	35.60	15.467	
6,000.0	5,930.1	5,970.9	5,899.8	18.9	18.6	-105.90	-540.4	-723.5	560.5	524.2	36.24	15.465	
6,100.0	6,028.8	6,070.4	5,997.9	19.3	18.9	-105.87	-550.0	-736.9	570.3	533.5	36.89	15.462	
6,200.0	6,127.5	6,169.9	6,096.1	19.6	19.3	-105.83	-559.6	-750.2	580.2	542.7	37.53	15.460	
6,300.0	6,226.2	6,269.4	6,194.2	19.9	19.6	-105.80	-569.2	-763.6	590.1	551.9	38.17	15.457	
6,400.0	6,325.0	6,369.0	6,292.3	20.3	19.9	-105.77	-578.8	-777.0	599.9	561.1	38.82	15.455	
6,500.0	6,423.7	6,468.5	6,390.5	20.6	20.3	-105.73	-588.4	-790.4	609.8	570.3	39.46	15.452	
6,600.0	6,522.6	6,574.4	6,495.2	20.9	20.6	-105.85	-597.8	-803.5	618.9	578.8	40.07	15.447	
6,700.0	6,622.0	6,681.8	6,601.9	21.1	20.8	-105.98	-605.1	-813.6	625.9	585.3	40.56	15.430	
6,800.0	6,721.6	6,789.5	6,709.2	21.3	21.0	-106.08	-610.1	-820.5	630.6	589.7	40.95	15.399	
6,900.0	6,821.6	6,897.3	6,816.9	21.4	21.2	-106.15	-612.6	-824.1	633.2	592.0	41.24	15.354	
7,000.0	6,921.5	7,001.7	6,921.3	21.5	21.3	-76.53	-613.1	-824.7	633.7	592.2	41.45	15.287	
7,100.0	7,021.5	7,101.0	7,020.6	21.6	21.4	-76.52	-613.3	-825.1	633.7	592.0	41.68	15.206	
7,200.0	7,121.5	7,200.4	7,120.0	21.8	21.5	-76.52	-613.7	-825.8	633.7	591.8	41.91	15.121	
7,300.0	7,221.5	7,299.8	7,219.4	21.9	21.6	-76.51	-614.3	-826.9	633.7	591.6	42.16	15.033	
7,400.0	7,321.5	7,399.8	7,319.4	22.0	21.8	-76.51	-615.0	-828.1	633.7	591.3	42.41	14.944	
7,500.0	7,421.5	7,499.8	7,419.4	22.1	21.9	-76.51	-615.7	-829.4	633.7	591.1	42.66	14.856	
7,600.0	7,521.5	7,599.8	7,519.4	22.2	22.0	-76.51	-616.5	-830.6	633.7	590.8	42.91	14.768	
7,700.0	7,621.5	7,699.8	7,619.4	22.4	22.1	-76.51	-617.2	-831.8	633.7	590.6	43.17	14.681	
7,800.0	7,721.5	7,799.8	7,719.4	22.5	22.3	-76.51	-617.9	-833.1	633.7	590.3	43.42	14.595	
7,900.0	7,821.5	7,899.8	7,819.4	22.6	22.4	-76.51	-618.6	-834.3	633.7	590.0	43.68	14.509	
8,000.0	7,921.5	7,999.8	7,919.3	22.7	22.5	-76.51	-619.3	-835.6	633.7	589.8	43.94	14.424	
8,100.0	8,021.4	8,099.8	8,019.3	22.8	22.6	-76.51	-620.0	-836.8	633.7	589.5	44.20	14.339	
8,200.0	8,121.4	8,199.8	8,119.3	23.0	22.8	-76.51	-620.8	-838.1	633.7	589.3	44.46	14.255	
8,300.0	8,221.4	8,299.8	8,219.3	23.1	22.9	-76.51	-621.5	-839.3	633.7	589.0	44.72	14.171	
8,400.0	8,321.4	8,399.8	8,319.3	23.2	23.0	-76.51	-622.2	-840.6	633.7	588.7	44.98	14.089	
8,500.0	8,421.4	8,499.8	8,419.3	23.4	23.2	-76.51	-622.9	-841.8	633.7	588.5	45.25	14.006	
8,600.0	8,521.4	8,599.8	8,519.3	23.5	23.3	-76.51	-623.6	-843.1	633.7	588.2	45.51	13.924	
8,700.0	8,621.4	8,699.8	8,619.3	23.6	23.4	-76.51	-624.3	-844.3	633.7	587.9	45.78	13.843	
8,800.0	8,721.4	8,799.8	8,719.3	23.7	23.6	-76.51	-625.1	-845.5	633.7	587.7	46.05	13.763	
8,900.0	8,821.4	8,899.8	8,819.3	23.9	23.7	-76.51	-625.8	-846.8	633.7	587.4	46.32	13.683	
9,000.0	8,921.4	8,999.8	8,919.2	24.0	23.8	-76.51	-626.5	-848.0	633.7	587.1	46.59	13.603	
9,100.0	9,021.3	9,099.8	9,019.2	24.1	24.0	-76.51	-627.2	-849.3	633.7	586.9	46.86	13.524	
9,200.0	9,121.3	9,199.8	9,119.2	24.3	24.1	-76.51	-627.9	-850.5	633.7	586.6	47.13	13.446	
9,300.0	9,221.3	9,299.8	9,219.2	24.4	24.2	-76.51	-628.6	-851.8	633.7	586.3	47.40	13.369	
9,400.0	9,321.3	9,399.8	9,319.2	24.5	24.4	-76.51	-629.4	-853.0	633.7	586.0	47.68	13.292	
9,500.0	9,421.3	9,499.8	9,419.2	24.7	24.5	-76.51	-630.1	-854.3	633.7	585.8	47.95	13.215	
9,600.0	9,521.3	9,599.8	9,519.2	24.8	24.6	-76.51	-630.8	-855.5	633.7	585.5	48.23	13.140	
9,700.0	9,621.3	9,699.8	9,619.2	24.9	24.8	-76.51	-631.5	-856.8	633.7	585.2	48.51	13.064	
9,800.0	9,721.3	9,799.8	9,719.2	25.1	24.9	-76.51	-632.2	-858.0	633.7	584.9	48.79	12.990	
9,900.0	9,821.3	9,899.8	9,819.1	25.2	25.0	-76.51	-632.9	-859.2	633.7	584.6	49.06	12.916	
9,911.9	9,833.1	9,911.7	9,831.0	25.2	25.1	-76.51	-633.0	-859.4	633.7	584.6	49.10	12.907	
9,924.7	9,846.0	9,911.7	9,831.0	25.2	25.1	-76.51	-633.0	-859.4	633.8	584.7	49.12	12.905	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

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

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-150.68	-43.7	-24.5	50.1				
100.0	100.0	100.0	100.0	0.1	0.1	-150.68	-43.7	-24.5	50.1	49.8	0.30	168.953	
200.0	200.0	200.0	200.0	0.3	0.3	-150.68	-43.7	-24.5	50.1	49.5	0.65	77.627	
300.0	300.0	300.0	300.0	0.5	0.5	-62.15	-43.7	-24.5	49.3	48.3	1.00	49.407	
400.0	399.8	399.8	399.8	0.7	0.7	-67.82	-43.7	-24.5	47.1	45.7	1.36	34.500	
486.4	486.0	484.8	484.8	0.9	0.8	-75.54	-44.6	-25.5	45.9	44.2	1.71	26.864	CC
500.0	499.5	498.2	498.1	0.9	0.8	-76.91	-44.9	-25.8	45.9	44.2	1.76	26.052	ES
600.0	598.7	596.5	596.4	1.2	1.0	-87.45	-48.3	-29.5	48.3	46.0	2.21	21.810	
700.0	697.5	694.8	694.3	1.5	1.2	-97.11	-54.1	-35.6	54.5	51.8	2.71	20.116	
800.0	796.2	793.1	791.9	1.8	1.5	-102.50	-62.2	-44.2	63.8	60.5	3.24	19.705	
900.0	895.0	891.3	888.9	2.1	1.8	-104.18	-72.5	-55.2	75.0	71.2	3.81	19.710	
1,000.0	993.7	989.2	985.0	2.4	2.1	-103.46	-85.1	-68.5	87.9	83.5	4.42	19.881	
1,100.0	1,092.4	1,087.6	1,081.2	2.8	2.5	-101.63	-99.4	-83.8	102.1	97.1	5.06	20.189	
1,200.0	1,191.2	1,186.5	1,177.8	3.1	2.9	-100.16	-114.0	-99.4	116.5	110.8	5.70	20.429	
1,300.0	1,289.9	1,285.4	1,274.4	3.4	3.2	-99.02	-128.6	-114.9	131.0	124.6	6.35	20.620	
1,400.0	1,388.6	1,384.4	1,371.0	3.7	3.6	-98.10	-143.2	-130.4	145.4	138.4	7.00	20.776	
1,500.0	1,487.3	1,483.3	1,467.6	4.1	4.0	-97.35	-157.8	-145.9	160.0	152.3	7.65	20.905	
1,600.0	1,586.1	1,582.2	1,564.2	4.4	4.4	-96.72	-172.3	-161.4	174.5	166.2	8.30	21.014	
1,700.0	1,684.8	1,681.1	1,660.8	4.7	4.8	-96.19	-186.9	-176.9	189.1	180.1	8.96	21.108	
1,800.0	1,783.5	1,780.1	1,757.4	5.1	5.2	-95.74	-201.5	-192.4	203.6	194.0	9.61	21.190	
1,900.0	1,882.2	1,879.0	1,854.0	5.4	5.7	-95.35	-216.1	-207.9	218.2	208.0	10.26	21.262	
2,000.0	1,981.0	1,977.9	1,950.6	5.7	6.1	-95.00	-230.7	-223.5	232.8	221.9	10.92	21.325	
2,100.0	2,079.7	2,076.8	2,047.2	6.0	6.5	-94.70	-245.3	-239.0	247.4	235.8	11.57	21.381	
2,200.0	2,178.4	2,175.7	2,143.8	6.4	6.9	-94.43	-259.8	-254.5	262.0	249.8	12.23	21.432	
2,300.0	2,277.2	2,274.7	2,240.4	6.7	7.3	-94.19	-274.4	-270.0	276.6	263.8	12.88	21.478	
2,400.0	2,375.9	2,373.6	2,337.0	7.0	7.7	-93.97	-289.0	-285.5	291.3	277.7	13.53	21.519	
2,500.0	2,474.6	2,472.5	2,433.6	7.4	8.1	-93.78	-303.6	-301.0	305.9	291.7	14.19	21.557	
2,600.0	2,573.3	2,571.4	2,530.2	7.7	8.5	-93.60	-318.2	-316.5	320.5	305.6	14.84	21.591	
2,700.0	2,672.1	2,670.3	2,626.8	8.0	8.9	-93.44	-332.7	-332.0	335.1	319.6	15.50	21.623	
2,800.0	2,770.8	2,769.3	2,723.4	8.4	9.3	-93.29	-347.3	-347.6	349.7	333.6	16.15	21.652	
2,900.0	2,869.5	2,868.2	2,820.0	8.7	9.8	-93.15	-361.9	-363.1	364.4	347.6	16.81	21.679	
3,000.0	2,968.2	2,967.1	2,916.6	9.0	10.2	-93.02	-376.5	-378.6	379.0	361.5	17.46	21.704	
3,100.0	3,067.0	3,066.0	3,013.2	9.3	10.6	-92.91	-391.1	-394.1	393.6	375.5	18.12	21.728	
3,200.0	3,165.7	3,164.9	3,109.8	9.7	11.0	-92.80	-405.6	-409.6	408.3	389.5	18.77	21.749	
3,300.0	3,264.4	3,263.9	3,206.4	10.0	11.4	-92.70	-420.2	-425.1	422.9	403.5	19.43	21.770	
3,400.0	3,363.2	3,362.8	3,303.0	10.3	11.8	-92.60	-434.8	-440.6	437.5	417.5	20.08	21.789	
3,500.0	3,461.9	3,461.7	3,399.7	10.7	12.2	-92.52	-449.4	-456.1	452.2	431.5	20.74	21.806	
3,600.0	3,560.6	3,560.6	3,496.3	11.0	12.6	-92.43	-464.0	-471.7	466.8	445.4	21.39	21.823	
3,700.0	3,659.3	3,659.5	3,592.9	11.3	13.0	-92.35	-478.5	-487.2	481.5	459.4	22.05	21.839	
3,800.0	3,758.1	3,758.5	3,689.5	11.7	13.5	-92.28	-493.1	-502.7	496.1	473.4	22.70	21.854	
3,900.0	3,856.8	3,857.4	3,786.1	12.0	13.9	-92.21	-507.7	-518.2	510.7	487.4	23.36	21.868	
4,000.0	3,955.5	3,956.3	3,882.7	12.3	14.3	-92.15	-522.3	-533.7	525.4	501.4	24.01	21.881	
4,100.0	4,054.2	4,055.2	3,979.3	12.6	14.7	-92.09	-536.9	-549.2	540.0	515.4	24.67	21.894	
4,200.0	4,153.0	4,154.1	4,075.9	13.0	15.1	-92.03	-551.5	-564.7	554.7	529.4	25.32	21.906	
4,300.0	4,251.7	4,253.1	4,172.5	13.3	15.5	-91.97	-566.0	-580.3	569.3	543.3	25.98	21.918	
4,400.0	4,350.4	4,352.0	4,269.1	13.6	15.9	-91.92	-580.6	-595.8	584.0	557.3	26.63	21.928	
4,500.0	4,449.2	4,450.9	4,365.7	14.0	16.4	-91.87	-595.2	-611.3	598.6	571.3	27.29	21.939	
4,600.0	4,547.9	4,549.8	4,462.3	14.3	16.8	-91.82	-609.8	-626.8	613.3	585.3	27.94	21.949	
4,700.0	4,646.6	4,648.7	4,558.9	14.6	17.2	-91.78	-624.4	-642.3	627.9	599.3	28.60	21.958	
4,800.0	4,745.3	4,747.7	4,655.5	15.0	17.6	-91.73	-638.9	-657.8	642.6	613.3	29.25	21.967	
4,900.0	4,844.1	4,846.6	4,752.1	15.3	18.0	-91.69	-653.5	-673.3	657.2	627.3	29.91	21.976	
5,000.0	4,942.8	4,945.5	4,848.7	15.6	18.4	-91.65	-668.1	-688.8	671.8	641.3	30.56	21.984	

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 OM02C 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:	OM02C 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
5,100.0	5,041.5	5,044.4	4,945.3	16.0	18.8	-91.62	-682.7	-704.4	686.5	655.3	31.22	21.992	
5,200.0	5,140.2	5,143.3	5,041.9	16.3	19.2	-91.58	-697.3	-719.9	701.1	669.3	31.87	22.000	
5,300.0	5,239.0	5,242.3	5,138.5	16.6	19.7	-91.54	-711.8	-735.4	715.8	683.3	32.53	22.007	
5,400.0	5,337.7	5,341.2	5,235.1	16.9	20.1	-91.51	-726.4	-750.9	730.4	697.3	33.18	22.014	
5,500.0	5,436.4	5,440.1	5,331.7	17.3	20.5	-91.48	-741.0	-766.4	745.1	711.2	33.84	22.021	
5,600.0	5,535.2	5,539.0	5,428.3	17.6	20.9	-91.45	-755.6	-781.9	759.7	725.2	34.49	22.027	
5,700.0	5,633.9	5,637.9	5,524.9	17.9	21.3	-91.42	-770.2	-797.4	774.4	739.2	35.15	22.034	
5,800.0	5,732.6	5,736.9	5,621.5	18.3	21.7	-91.39	-784.8	-812.9	789.0	753.2	35.80	22.040	
5,900.0	5,831.3	5,835.8	5,718.1	18.6	22.1	-91.36	-799.3	-828.5	803.7	767.2	36.46	22.046	
6,000.0	5,930.1	5,934.7	5,814.7	18.9	22.5	-91.34	-813.9	-844.0	818.3	781.2	37.11	22.051	
6,100.0	6,028.8	6,033.6	5,911.3	19.3	23.0	-91.31	-828.5	-859.5	833.0	795.2	37.77	22.057	
6,200.0	6,127.5	6,132.6	6,007.9	19.6	23.4	-91.28	-843.1	-875.0	847.6	809.2	38.42	22.062	
6,300.0	6,226.2	6,231.5	6,104.5	19.9	23.8	-91.26	-857.7	-890.5	862.3	823.2	39.08	22.067	
6,400.0	6,325.0	6,330.4	6,201.1	20.3	24.2	-91.24	-872.2	-906.0	876.9	837.2	39.73	22.072	
6,500.0	6,423.7	6,442.0	6,310.2	20.6	24.6	-91.25	-888.2	-923.0	891.2	850.8	40.41	22.053	
6,600.0	6,522.6	6,566.9	6,433.3	20.9	25.0	-91.58	-903.0	-938.7	903.0	861.9	41.11	21.966	
6,700.0	6,622.0	6,692.6	6,557.9	21.1	25.4	-91.88	-914.1	-950.6	911.9	870.2	41.69	21.874	
6,800.0	6,721.6	6,818.7	6,683.5	21.3	25.6	-92.10	-921.5	-958.5	917.8	875.6	42.14	21.781	
6,900.0	6,821.6	6,945.1	6,809.8	21.4	25.7	-92.25	-925.1	-962.3	920.6	878.2	42.46	21.683	
7,000.0	6,921.5	7,055.8	6,920.5	21.5	25.8	-62.64	-925.5	-962.8	921.0	878.3	42.68	21.577	
7,100.0	7,021.5	7,154.0	7,018.7	21.6	25.9	-62.63	-925.8	-963.1	921.1	878.2	42.90	21.470	
7,200.0	7,121.5	7,252.2	7,116.9	21.8	26.0	-62.63	-926.2	-963.9	921.1	878.0	43.13	21.359	
7,300.0	7,221.5	7,350.7	7,215.4	21.9	26.1	-62.62	-926.8	-965.0	921.1	877.8	43.36	21.243	
7,400.0	7,321.5	7,450.7	7,315.4	22.0	26.2	-62.62	-927.6	-966.2	921.2	877.5	43.60	21.125	
7,500.0	7,421.5	7,550.7	7,415.4	22.1	26.3	-62.62	-928.3	-967.5	921.2	877.3	43.85	21.008	
7,600.0	7,521.5	7,650.7	7,515.4	22.2	26.5	-62.62	-929.0	-968.7	921.2	877.1	44.09	20.891	
7,700.0	7,621.5	7,750.7	7,615.4	22.4	26.6	-62.62	-929.7	-970.0	921.2	876.8	44.34	20.775	
7,800.0	7,721.5	7,850.7	7,715.4	22.5	26.7	-62.62	-930.4	-971.2	921.2	876.6	44.59	20.660	
7,900.0	7,821.5	7,950.7	7,815.4	22.6	26.8	-62.62	-931.2	-972.5	921.2	876.3	44.84	20.545	
8,000.0	7,921.5	8,050.7	7,915.4	22.7	26.9	-62.62	-931.9	-973.7	921.2	876.1	45.09	20.431	
8,100.0	8,021.4	8,150.7	8,015.3	22.8	27.0	-62.62	-932.6	-975.0	921.2	875.8	45.34	20.318	
8,200.0	8,121.4	8,250.7	8,115.3	23.0	27.1	-62.62	-933.3	-976.2	921.2	875.6	45.59	20.205	
8,300.0	8,221.4	8,350.7	8,215.3	23.1	27.2	-62.62	-934.0	-977.4	921.2	875.3	45.85	20.093	
8,400.0	8,321.4	8,450.7	8,315.3	23.2	27.4	-62.62	-934.7	-978.7	921.2	875.1	46.10	19.982	
8,500.0	8,421.4	8,550.7	8,415.3	23.4	27.5	-62.62	-935.5	-979.9	921.2	874.8	46.36	19.871	
8,600.0	8,521.4	8,650.7	8,515.3	23.5	27.6	-62.62	-936.2	-981.2	921.2	874.6	46.62	19.761	
8,700.0	8,621.4	8,750.7	8,615.3	23.6	27.7	-62.62	-936.9	-982.4	921.2	874.3	46.88	19.652	
8,800.0	8,721.4	8,850.7	8,715.3	23.7	27.8	-62.62	-937.6	-983.7	921.2	874.1	47.14	19.543	
8,900.0	8,821.4	8,950.7	8,815.3	23.9	27.9	-62.62	-938.3	-984.9	921.2	873.8	47.40	19.435	
9,000.0	8,921.4	9,050.7	8,915.3	24.0	28.0	-62.62	-939.1	-986.2	921.2	873.5	47.66	19.328	
9,100.0	9,021.3	9,150.7	9,015.2	24.1	28.2	-62.62	-939.8	-987.4	921.2	873.3	47.92	19.222	
9,200.0	9,121.3	9,250.7	9,115.2	24.3	28.3	-62.62	-940.5	-988.6	921.2	873.0	48.19	19.116	
9,300.0	9,221.3	9,350.7	9,215.2	24.4	28.4	-62.62	-941.2	-989.9	921.2	872.7	48.46	19.011	
9,400.0	9,321.3	9,450.7	9,315.2	24.5	28.5	-62.62	-941.9	-991.1	921.2	872.5	48.72	18.907	
9,500.0	9,421.3	9,550.7	9,415.2	24.7	28.6	-62.62	-942.7	-992.4	921.2	872.2	48.99	18.803	
9,600.0	9,521.3	9,650.7	9,515.2	24.8	28.8	-62.62	-943.4	-993.6	921.2	871.9	49.26	18.700	
9,700.0	9,621.3	9,750.7	9,615.2	24.9	28.9	-62.62	-944.1	-994.9	921.2	871.7	49.53	18.598	
9,800.0	9,721.3	9,850.7	9,715.2	25.1	29.0	-62.62	-944.8	-996.1	921.2	871.4	49.80	18.497	
9,900.0	9,821.3	9,950.7	9,815.2	25.2	29.1	-62.62	-945.5	-997.4	921.2	871.1	50.08	18.396	
9,924.7	9,846.0	9,951.6	9,816.0	25.2	29.1	-62.62	-945.5	-997.4	921.5	871.4	50.11	18.390	SF

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C 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	-150.50	-60.8	-34.4	69.9				
100.0	100.0	100.0	100.0	0.1	0.1	-150.50	-60.8	-34.4	69.9	69.6	0.30	235.571	
200.0	200.0	200.0	200.0	0.3	0.3	-150.50	-60.8	-34.4	69.9	69.2	0.65	108.235	
300.0	300.0	300.0	300.0	0.5	0.5	-61.46	-60.8	-34.4	69.0	68.0	1.00	69.211	
385.0	384.9	383.0	383.0	0.7	0.6	-64.30	-61.7	-35.2	68.3	67.0	1.31	52.326	CC
400.0	399.8	397.6	397.6	0.7	0.7	-64.94	-62.1	-35.5	68.3	67.0	1.36	50.255	ES
500.0	499.5	495.2	495.0	0.9	0.9	-70.15	-65.9	-38.7	69.9	68.1	1.75	39.830	
600.0	598.7	592.5	592.0	1.2	1.1	-76.44	-72.2	-44.1	74.2	72.0	2.20	33.675	
700.0	697.5	689.6	688.4	1.5	1.3	-82.87	-81.0	-51.5	81.7	79.0	2.71	30.162	
800.0	796.2	786.3	784.0	1.8	1.6	-87.29	-92.2	-61.1	92.8	89.5	3.25	28.516	
900.0	895.0	882.7	878.7	2.1	1.9	-89.57	-105.9	-72.6	106.7	102.9	3.83	27.888	
1,000.0	993.7	978.4	972.1	2.4	2.3	-90.30	-121.8	-86.1	123.3	118.9	4.43	27.844	
1,100.0	1,092.4	1,074.5	1,065.1	2.8	2.8	-90.02	-140.1	-101.6	142.2	137.2	5.04	28.199	
1,200.0	1,191.2	1,172.5	1,159.9	3.1	3.2	-89.63	-159.2	-117.9	161.7	156.0	5.67	28.507	
1,300.0	1,289.9	1,270.6	1,254.7	3.4	3.7	-89.32	-178.4	-134.1	181.2	174.9	6.30	28.735	
1,400.0	1,388.6	1,368.7	1,349.5	3.7	4.1	-89.07	-197.6	-150.4	200.6	193.7	6.94	28.907	
1,500.0	1,487.3	1,466.8	1,444.3	4.1	4.6	-88.87	-216.8	-166.6	220.1	212.5	7.58	29.041	
1,600.0	1,586.1	1,564.9	1,539.1	4.4	5.1	-88.70	-235.9	-182.9	239.6	231.4	8.22	29.147	
1,700.0	1,684.8	1,663.0	1,633.9	4.7	5.5	-88.55	-255.1	-199.2	259.1	250.2	8.86	29.234	
1,800.0	1,783.5	1,761.0	1,728.7	5.1	6.0	-88.43	-274.3	-215.4	278.5	269.0	9.50	29.306	
1,900.0	1,882.2	1,859.1	1,823.6	5.4	6.5	-88.32	-293.5	-231.7	298.0	287.9	10.15	29.366	
2,000.0	1,981.0	1,957.2	1,918.4	5.7	6.9	-88.22	-312.6	-247.9	317.5	306.7	10.79	29.417	
2,100.0	2,079.7	2,055.3	2,013.2	6.0	7.4	-88.14	-331.8	-264.2	337.0	325.6	11.44	29.461	
2,200.0	2,178.4	2,153.4	2,108.0	6.4	7.9	-88.06	-351.0	-280.5	356.5	344.4	12.08	29.499	
2,300.0	2,277.2	2,251.4	2,202.8	6.7	8.3	-88.00	-370.2	-296.7	376.0	363.2	12.73	29.532	
2,400.0	2,375.9	2,349.5	2,297.6	7.0	8.8	-87.94	-389.3	-313.0	395.5	382.1	13.38	29.562	
2,500.0	2,474.6	2,447.6	2,392.4	7.4	9.3	-87.88	-408.5	-329.2	414.9	400.9	14.02	29.588	
2,600.0	2,573.3	2,545.7	2,487.2	7.7	9.8	-87.83	-427.7	-345.5	434.4	419.8	14.67	29.611	
2,700.0	2,672.1	2,643.8	2,582.0	8.0	10.2	-87.78	-446.9	-361.8	453.9	438.6	15.32	29.632	
2,800.0	2,770.8	2,741.9	2,676.8	8.4	10.7	-87.74	-466.0	-378.0	473.4	457.4	15.97	29.651	
2,900.0	2,869.5	2,839.9	2,771.6	8.7	11.2	-87.70	-485.2	-394.3	492.9	476.3	16.61	29.668	
3,000.0	2,968.2	2,938.0	2,866.4	9.0	11.7	-87.67	-504.4	-410.5	512.4	495.1	17.26	29.683	
3,100.0	3,067.0	3,036.1	2,961.2	9.3	12.1	-87.63	-523.6	-426.8	531.9	514.0	17.91	29.697	
3,200.0	3,165.7	3,134.2	3,056.0	9.7	12.6	-87.60	-542.8	-443.1	551.4	532.8	18.56	29.710	
3,300.0	3,264.4	3,232.3	3,150.8	10.0	13.1	-87.58	-561.9	-459.3	570.9	551.6	19.21	29.722	
3,400.0	3,363.2	3,330.4	3,245.6	10.3	13.6	-87.55	-581.1	-475.6	590.3	570.5	19.85	29.734	
3,500.0	3,461.9	3,428.4	3,340.4	10.7	14.0	-87.52	-600.3	-491.8	609.8	589.3	20.50	29.744	
3,600.0	3,560.6	3,526.5	3,435.2	11.0	14.5	-87.50	-619.5	-508.1	629.3	608.2	21.15	29.753	
3,700.0	3,659.3	3,624.6	3,530.0	11.3	15.0	-87.48	-638.6	-524.4	648.8	627.0	21.80	29.762	
3,800.0	3,758.1	3,722.7	3,624.8	11.7	15.5	-87.46	-657.8	-540.6	668.3	645.9	22.45	29.770	
3,900.0	3,856.8	3,820.8	3,719.7	12.0	15.9	-87.44	-677.0	-556.9	687.8	664.7	23.10	29.778	
4,000.0	3,955.5	3,918.8	3,814.5	12.3	16.4	-87.42	-696.2	-573.2	707.3	683.5	23.75	29.785	
4,100.0	4,054.2	4,016.9	3,909.3	12.6	16.9	-87.40	-715.3	-589.4	726.8	702.4	24.39	29.792	
4,200.0	4,153.0	4,115.0	4,004.1	13.0	17.4	-87.38	-734.5	-605.7	746.3	721.2	25.04	29.799	
4,300.0	4,251.7	4,213.1	4,098.9	13.3	17.8	-87.37	-753.7	-621.9	765.7	740.1	25.69	29.805	
4,400.0	4,350.4	4,311.2	4,193.7	13.6	18.3	-87.35	-772.9	-638.2	785.2	758.9	26.34	29.810	
4,500.0	4,449.2	4,409.3	4,288.5	14.0	18.8	-87.34	-792.0	-654.5	804.7	777.7	26.99	29.816	
4,600.0	4,547.9	4,507.3	4,383.3	14.3	19.3	-87.33	-811.2	-670.7	824.2	796.6	27.64	29.821	
4,700.0	4,646.6	4,605.4	4,478.1	14.6	19.8	-87.31	-830.4	-687.0	843.7	815.4	28.29	29.826	
4,800.0	4,745.3	4,703.5	4,572.9	15.0	20.2	-87.30	-849.6	-703.2	863.2	834.3	28.94	29.830	
4,900.0	4,844.1	4,801.6	4,667.7	15.3	20.7	-87.29	-868.7	-719.5	882.7	853.1	29.59	29.834	
5,000.0	4,942.8	4,899.7	4,762.5	15.6	21.2	-87.28	-887.9	-735.8	902.2	871.9	30.24	29.839	

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 OM02C 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:	OM02C 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	5,041.5	4,997.7	4,857.3	16.0	21.7	-87.27	-907.1	-752.0	921.7	890.8	30.88	29.843	
5,200.0	5,140.2	5,095.8	4,952.1	16.3	22.1	-87.26	-926.3	-768.3	941.2	909.6	31.53	29.846	
5,300.0	5,239.0	5,193.9	5,046.9	16.6	22.6	-87.25	-945.4	-784.5	960.6	928.5	32.18	29.850	
5,400.0	5,337.7	5,292.0	5,141.7	16.9	23.1	-87.24	-964.6	-800.8	980.1	947.3	32.83	29.853	
5,500.0	5,436.4	5,390.1	5,236.5	17.3	23.6	-87.23	-983.8	-817.1	999.6	966.1	33.48	29.857	
5,600.0	5,535.2	5,488.2	5,331.3	17.6	24.0	-87.22	-1,003.0	-833.3	1,019.1	985.0	34.13	29.860	
5,700.0	5,633.9	5,586.2	5,426.1	17.9	24.5	-87.21	-1,022.1	-849.6	1,038.6	1,003.8	34.78	29.863	
5,800.0	5,732.6	5,684.3	5,520.9	18.3	25.0	-87.20	-1,041.3	-865.8	1,058.1	1,022.7	35.43	29.866	
5,900.0	5,831.3	5,782.4	5,615.8	18.6	25.5	-87.19	-1,060.5	-882.1	1,077.6	1,041.5	36.08	29.868	
6,000.0	5,930.1	5,880.5	5,710.6	18.9	25.9	-87.19	-1,079.7	-898.4	1,097.1	1,060.4	36.73	29.871	
6,100.0	6,028.8	5,978.6	5,805.4	19.3	26.4	-87.18	-1,098.9	-914.6	1,116.6	1,079.2	37.38	29.874	
6,200.0	6,127.5	6,076.7	5,900.2	19.6	26.9	-87.17	-1,118.0	-930.9	1,136.1	1,098.0	38.03	29.876	
6,300.0	6,226.2	6,174.7	5,995.0	19.9	27.4	-87.16	-1,137.2	-947.1	1,155.6	1,116.9	38.67	29.879	
6,400.0	6,325.0	6,272.8	6,089.8	20.3	27.8	-87.16	-1,156.4	-963.4	1,175.0	1,135.7	39.32	29.881	
6,500.0	6,423.7	6,402.3	6,215.3	20.6	28.4	-87.20	-1,180.5	-983.8	1,193.7	1,153.6	40.06	29.796	
6,600.0	6,522.6	6,549.2	6,359.3	20.9	28.9	-87.61	-1,202.7	-1,002.7	1,208.7	1,167.8	40.86	29.583	
6,700.0	6,622.0	6,697.5	6,506.0	21.1	29.4	-87.98	-1,219.5	-1,016.9	1,219.8	1,178.3	41.53	29.375	
6,800.0	6,721.6	6,846.8	6,654.6	21.3	29.7	-88.25	-1,230.4	-1,026.2	1,227.1	1,185.0	42.04	29.187	
6,900.0	6,821.6	6,996.7	6,804.3	21.4	29.8	-88.42	-1,235.5	-1,030.5	1,230.4	1,188.0	42.42	29.005	
7,000.0	6,921.5	7,112.2	6,919.8	21.5	29.9	-58.81	-1,235.9	-1,030.8	1,230.6	1,188.0	42.65	28.852	
7,100.0	7,021.5	7,209.5	7,017.0	21.6	30.0	-58.80	-1,236.1	-1,031.3	1,230.7	1,187.9	42.87	28.710	
7,200.0	7,121.5	7,306.8	7,114.3	21.8	30.1	-58.80	-1,236.6	-1,032.0	1,230.8	1,187.7	43.09	28.561	
7,300.0	7,221.5	7,404.8	7,212.3	21.9	30.2	-58.79	-1,237.2	-1,033.2	1,230.9	1,187.5	43.33	28.406	
7,400.0	7,321.5	7,504.8	7,312.3	22.0	30.3	-58.79	-1,237.9	-1,034.4	1,230.9	1,187.3	43.57	28.249	
7,500.0	7,421.5	7,604.8	7,412.3	22.1	30.4	-58.79	-1,238.7	-1,035.6	1,230.9	1,187.1	43.82	28.092	
7,600.0	7,521.5	7,704.8	7,512.3	22.2	30.5	-58.79	-1,239.4	-1,036.9	1,230.9	1,186.8	44.06	27.937	
7,700.0	7,621.5	7,804.8	7,612.3	22.4	30.6	-58.79	-1,240.1	-1,038.1	1,230.9	1,186.6	44.31	27.782	
7,800.0	7,721.5	7,904.8	7,712.3	22.5	30.7	-58.79	-1,240.8	-1,039.4	1,230.9	1,186.3	44.55	27.628	
7,900.0	7,821.5	8,004.8	7,812.3	22.6	30.8	-58.79	-1,241.5	-1,040.6	1,230.9	1,186.1	44.80	27.474	
8,000.0	7,921.5	8,104.8	7,912.3	22.7	30.9	-58.79	-1,242.3	-1,041.8	1,230.9	1,185.8	45.05	27.322	
8,100.0	8,021.4	8,204.8	8,012.3	22.8	31.0	-58.79	-1,243.0	-1,043.1	1,230.9	1,185.6	45.30	27.170	
8,200.0	8,121.4	8,304.8	8,112.3	23.0	31.1	-58.79	-1,243.7	-1,044.3	1,230.9	1,185.3	45.56	27.020	
8,300.0	8,221.4	8,404.8	8,212.2	23.1	31.2	-58.79	-1,244.4	-1,045.6	1,230.9	1,185.1	45.81	26.870	
8,400.0	8,321.4	8,504.8	8,312.2	23.2	31.3	-58.79	-1,245.1	-1,046.8	1,230.9	1,184.8	46.06	26.721	
8,500.0	8,421.4	8,604.8	8,412.2	23.4	31.4	-58.79	-1,245.8	-1,048.1	1,230.9	1,184.6	46.32	26.573	
8,600.0	8,521.4	8,704.8	8,512.2	23.5	31.5	-58.79	-1,246.6	-1,049.3	1,230.9	1,184.3	46.58	26.426	
8,700.0	8,621.4	8,804.8	8,612.2	23.6	31.6	-58.79	-1,247.3	-1,050.5	1,230.9	1,184.1	46.84	26.280	
8,800.0	8,721.4	8,904.8	8,712.2	23.7	31.7	-58.79	-1,248.0	-1,051.8	1,230.9	1,183.8	47.10	26.135	
8,900.0	8,821.4	9,004.8	8,812.2	23.9	31.8	-58.79	-1,248.7	-1,053.0	1,230.9	1,183.6	47.36	25.991	
9,000.0	8,921.4	9,104.8	8,912.2	24.0	31.9	-58.79	-1,249.4	-1,054.3	1,230.9	1,183.3	47.62	25.848	
9,100.0	9,021.3	9,204.8	9,012.2	24.1	32.0	-58.79	-1,250.2	-1,055.5	1,230.9	1,183.0	47.89	25.706	
9,200.0	9,121.3	9,304.8	9,112.2	24.3	32.1	-58.79	-1,250.9	-1,056.8	1,230.9	1,182.8	48.15	25.564	
9,300.0	9,221.3	9,404.8	9,212.1	24.4	32.2	-58.79	-1,251.6	-1,058.0	1,230.9	1,182.5	48.42	25.424	
9,400.0	9,321.3	9,504.8	9,312.1	24.5	32.3	-58.79	-1,252.3	-1,059.2	1,230.9	1,182.3	48.68	25.285	
9,500.0	9,421.3	9,604.8	9,412.1	24.7	32.4	-58.79	-1,253.0	-1,060.5	1,230.9	1,182.0	48.95	25.146	
9,600.0	9,521.3	9,704.8	9,512.1	24.8	32.6	-58.79	-1,253.8	-1,061.7	1,230.9	1,181.7	49.22	25.009	
9,700.0	9,621.3	9,804.8	9,612.1	24.9	32.7	-58.79	-1,254.5	-1,063.0	1,230.9	1,181.5	49.49	24.872	
9,800.0	9,721.3	9,904.8	9,712.1	25.1	32.8	-58.79	-1,255.2	-1,064.2	1,230.9	1,181.2	49.76	24.737	
9,858.6	9,779.9	9,963.4	9,770.7	25.1	32.8	-58.79	-1,255.6	-1,064.9	1,230.9	1,181.0	49.92	24.658	
9,900.0	9,821.3	9,998.7	9,806.0	25.2	32.9	-58.79	-1,255.9	-1,065.4	1,231.0	1,180.9	50.03	24.607	
9,924.7	9,846.0	9,998.7	9,806.0	25.2	32.9	-58.79	-1,255.9	-1,065.4	1,231.3	1,181.3	50.06	24.598 SF	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

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

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-150.54	-52.5	-29.6	60.2				
100.0	100.0	100.0	100.0	0.1	0.1	-150.54	-52.5	-29.6	60.2	59.9	0.30	203.023	
200.0	200.0	200.0	200.0	0.3	0.3	-150.54	-52.5	-29.6	60.2	59.6	0.65	93.281	
300.0	300.0	299.7	299.7	0.5	0.5	-63.35	-53.4	-28.2	59.6	58.6	1.00	59.580	
338.4	338.3	337.2	337.2	0.6	0.6	-65.93	-54.4	-27.3	59.4	58.3	1.14	52.033	CC, ES
400.0	399.8	397.4	397.3	0.7	0.7	-70.79	-56.8	-26.3	60.0	58.6	1.37	43.845	
500.0	499.5	494.8	494.5	0.9	0.9	-79.89	-63.0	-26.1	64.0	62.2	1.76	36.273	
600.0	598.7	591.7	591.0	1.2	1.1	-89.04	-71.9	-27.6	72.2	70.0	2.20	32.863	
700.0	697.5	688.2	686.7	1.5	1.4	-96.86	-83.6	-30.9	85.0	82.3	2.67	31.819	SF
800.0	796.2	784.2	781.5	1.8	1.6	-101.68	-97.9	-35.7	101.4	98.2	3.17	31.960	
900.0	895.0	879.7	875.2	2.1	2.0	-104.00	-114.8	-42.3	120.6	116.9	3.71	32.521	
1,000.0	993.7	974.4	967.6	2.4	2.4	-104.71	-134.2	-50.4	142.1	137.9	4.28	33.243	
1,100.0	1,092.4	1,068.1	1,058.3	2.8	2.8	-104.41	-155.9	-60.0	165.8	160.9	4.86	34.092	
1,200.0	1,191.2	1,164.6	1,151.1	3.1	3.3	-103.75	-179.8	-70.8	190.7	185.3	5.47	34.870	
1,300.0	1,289.9	1,261.5	1,244.3	3.4	3.7	-103.25	-203.8	-81.7	215.7	209.6	6.08	35.458	
1,400.0	1,388.6	1,358.3	1,337.5	3.7	4.2	-102.85	-227.7	-92.6	240.7	234.0	6.70	35.916	
1,500.0	1,487.3	1,455.1	1,430.6	4.1	4.7	-102.52	-251.7	-103.5	265.7	258.4	7.32	36.283	
1,600.0	1,586.1	1,551.9	1,523.8	4.4	5.2	-102.25	-275.7	-114.3	290.7	282.7	7.95	36.581	
1,700.0	1,684.8	1,648.7	1,617.0	4.7	5.7	-102.02	-299.6	-125.2	315.7	307.1	8.57	36.830	
1,800.0	1,783.5	1,745.5	1,710.2	5.1	6.1	-101.83	-323.6	-136.1	340.7	331.5	9.20	37.039	
1,900.0	1,882.2	1,842.4	1,803.3	5.4	6.6	-101.66	-347.6	-147.0	365.7	355.9	9.83	37.217	
2,000.0	1,981.0	1,939.2	1,896.5	5.7	7.1	-101.51	-371.5	-157.8	390.7	380.3	10.45	37.371	
2,100.0	2,079.7	2,036.0	1,989.7	6.0	7.6	-101.39	-395.5	-168.7	415.7	404.6	11.08	37.505	
2,200.0	2,178.4	2,132.8	2,082.8	6.4	8.1	-101.27	-419.5	-179.6	440.7	429.0	11.71	37.623	
2,300.0	2,277.2	2,229.6	2,176.0	6.7	8.6	-101.17	-443.4	-190.5	465.8	453.4	12.35	37.728	
2,400.0	2,375.9	2,326.4	2,269.2	7.0	9.1	-101.08	-467.4	-201.3	490.8	477.8	12.98	37.821	
2,500.0	2,474.6	2,423.3	2,362.4	7.4	9.5	-101.00	-491.4	-212.2	515.8	502.2	13.61	37.904	
2,600.0	2,573.3	2,520.1	2,455.5	7.7	10.0	-100.92	-515.4	-223.1	540.8	526.6	14.24	37.980	
2,700.0	2,672.1	2,616.9	2,548.7	8.0	10.5	-100.85	-539.3	-234.0	565.8	551.0	14.87	38.048	
2,800.0	2,770.8	2,713.7	2,641.9	8.4	11.0	-100.79	-563.3	-244.9	590.9	575.3	15.50	38.110	
2,900.0	2,869.5	2,810.5	2,735.0	8.7	11.5	-100.73	-587.3	-255.7	615.9	599.7	16.14	38.167	
3,000.0	2,968.2	2,907.3	2,828.2	9.0	12.0	-100.68	-611.2	-266.6	640.9	624.1	16.77	38.219	
3,100.0	3,067.0	3,004.2	2,921.4	9.3	12.5	-100.63	-635.2	-277.5	665.9	648.5	17.40	38.267	
3,200.0	3,165.7	3,101.0	3,014.5	9.7	13.0	-100.59	-659.2	-288.4	690.9	672.9	18.03	38.311	
3,300.0	3,264.4	3,197.8	3,107.7	10.0	13.5	-100.54	-683.1	-299.2	716.0	697.3	18.67	38.352	
3,400.0	3,363.2	3,294.6	3,200.9	10.3	14.0	-100.51	-707.1	-310.1	741.0	721.7	19.30	38.390	
3,500.0	3,461.9	3,391.4	3,294.1	10.7	14.5	-100.47	-731.1	-321.0	766.0	746.1	19.93	38.426	
3,600.0	3,560.6	3,488.2	3,387.2	11.0	14.9	-100.43	-755.0	-331.9	791.0	770.5	20.57	38.459	
3,700.0	3,659.3	3,585.1	3,480.4	11.3	15.4	-100.40	-779.0	-342.7	816.1	794.9	21.20	38.490	
3,800.0	3,758.1	3,681.9	3,573.6	11.7	15.9	-100.37	-803.0	-353.6	841.1	819.3	21.84	38.519	
3,900.0	3,856.8	3,778.7	3,666.7	12.0	16.4	-100.34	-826.9	-364.5	866.1	843.6	22.47	38.547	
4,000.0	3,955.5	3,875.5	3,759.9	12.3	16.9	-100.32	-850.9	-375.4	891.1	868.0	23.10	38.572	
4,100.0	4,054.2	3,972.3	3,853.1	12.6	17.4	-100.29	-874.9	-386.3	916.2	892.4	23.74	38.597	
4,200.0	4,153.0	4,069.2	3,946.3	13.0	17.9	-100.27	-898.8	-397.1	941.2	916.8	24.37	38.620	
4,300.0	4,251.7	4,166.0	4,039.4	13.3	18.4	-100.24	-922.8	-408.0	966.2	941.2	25.00	38.641	
4,400.0	4,350.4	4,262.8	4,132.6	13.6	18.9	-100.22	-946.8	-418.9	991.2	965.6	25.64	38.662	
4,500.0	4,449.2	4,359.6	4,225.8	14.0	19.4	-100.20	-970.7	-429.8	1,016.3	990.0	26.27	38.681	
4,600.0	4,547.9	4,456.4	4,318.9	14.3	19.9	-100.18	-994.7	-440.6	1,041.3	1,014.4	26.91	38.700	
4,700.0	4,646.6	4,553.2	4,412.1	14.6	20.3	-100.16	-1,018.7	-451.5	1,066.3	1,038.8	27.54	38.717	
4,800.0	4,745.3	4,650.1	4,505.3	15.0	20.8	-100.14	-1,042.6	-462.4	1,091.3	1,063.2	28.18	38.734	
4,900.0	4,844.1	4,746.9	4,598.5	15.3	21.3	-100.13	-1,066.6	-473.3	1,116.4	1,087.6	28.81	38.750	
5,000.0	4,942.8	4,843.7	4,691.6	15.6	21.8	-100.11	-1,090.6	-484.1	1,141.4	1,112.0	29.44	38.765	

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 OM02C 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:	OM02C B21 696	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

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

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,041.5	4,940.5	4,784.8	16.0	22.3	-100.09	-1,114.6	-495.0	1,166.4	1,136.3	30.08	38.780	
5,200.0	5,140.2	5,037.3	4,878.0	16.3	22.8	-100.08	-1,138.5	-505.9	1,191.5	1,160.7	30.71	38.794	
5,300.0	5,239.0	5,134.1	4,971.1	16.6	23.3	-100.07	-1,162.5	-516.8	1,216.5	1,185.1	31.35	38.807	
5,400.0	5,337.7	5,231.0	5,064.3	16.9	23.8	-100.05	-1,186.5	-527.7	1,241.5	1,209.5	31.98	38.820	
5,500.0	5,436.4	5,327.8	5,157.5	17.3	24.3	-100.04	-1,210.4	-538.5	1,266.5	1,233.9	32.62	38.832	
5,600.0	5,535.2	5,424.6	5,250.6	17.6	24.8	-100.03	-1,234.4	-549.4	1,291.6	1,258.3	33.25	38.844	
5,700.0	5,633.9	5,521.4	5,343.8	17.9	25.3	-100.01	-1,258.4	-560.3	1,316.6	1,282.7	33.88	38.856	
5,800.0	5,732.6	5,618.2	5,437.0	18.3	25.8	-100.00	-1,282.3	-571.2	1,341.6	1,307.1	34.52	38.866	
5,900.0	5,831.3	5,715.0	5,530.2	18.6	26.2	-99.99	-1,306.3	-582.0	1,366.6	1,331.5	35.15	38.877	
6,000.0	5,930.1	5,811.9	5,623.3	18.9	26.7	-99.98	-1,330.3	-592.9	1,391.7	1,355.9	35.79	38.887	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C 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	-150.54	-17.5	-9.9	20.1				
100.0	100.0	100.0	100.0	0.1	0.1	-150.54	-17.5	-9.9	20.1	19.8	0.30	67.674	
200.0	200.0	200.0	200.0	0.3	0.3	-150.54	-17.5	-9.9	20.1	19.4	0.65	31.094	
300.0	300.0	300.0	300.0	0.5	0.5	-64.75	-17.5	-9.9	19.3	18.3	1.00	19.315	
400.0	399.8	399.8	399.8	0.7	0.7	-80.28	-17.5	-9.9	17.7	16.3	1.37	12.933	
439.1	438.8	438.8	438.8	0.8	0.7	-90.00	-17.5	-9.9	17.4	15.9	1.52	11.434	CC, ES
500.0	499.5	499.5	499.5	0.9	0.8	-108.09	-17.5	-9.9	18.3	16.6	1.76	10.421	SF
600.0	598.7	598.7	598.7	1.2	1.0	-135.50	-17.5	-9.9	25.0	22.9	2.12	11.781	
700.0	697.5	696.6	696.5	1.5	1.2	-150.24	-19.0	-9.3	38.7	36.3	2.46	15.780	
800.0	796.2	793.8	793.6	1.8	1.4	-154.78	-23.7	-7.7	56.5	53.7	2.81	20.095	
900.0	895.0	890.2	889.7	2.1	1.6	-155.27	-31.4	-5.1	76.7	73.5	3.19	23.997	
1,000.0	993.7	985.6	984.4	2.4	1.8	-154.17	-42.0	-1.4	99.1	95.5	3.61	27.482	
1,100.0	1,092.4	1,079.8	1,077.6	2.8	2.0	-152.41	-55.4	3.2	123.8	119.8	4.04	30.615	
1,200.0	1,191.2	1,175.2	1,171.5	3.1	2.3	-150.57	-71.2	8.7	150.4	145.9	4.50	33.425	
1,300.0	1,289.9	1,271.5	1,266.2	3.4	2.6	-149.24	-87.2	14.2	177.2	172.3	4.96	35.714	
1,400.0	1,388.6	1,367.7	1,361.0	3.7	2.9	-148.25	-103.3	19.8	204.1	198.7	5.43	37.610	
1,500.0	1,487.3	1,464.0	1,455.7	4.1	3.3	-147.50	-119.4	25.4	231.0	225.1	5.89	39.203	
1,600.0	1,586.1	1,560.3	1,550.5	4.4	3.6	-146.90	-135.5	30.9	258.0	251.6	6.36	40.558	
1,700.0	1,684.8	1,656.6	1,645.3	4.7	3.9	-146.42	-151.6	36.5	284.9	278.1	6.83	41.724	
1,800.0	1,783.5	1,752.8	1,740.0	5.1	4.2	-146.02	-167.6	42.0	311.9	304.6	7.30	42.738	
1,900.0	1,882.2	1,849.1	1,834.8	5.4	4.5	-145.68	-183.7	47.6	338.9	331.1	7.77	43.626	
2,000.0	1,981.0	1,945.4	1,929.5	5.7	4.9	-145.40	-199.8	53.1	365.9	357.7	8.24	44.411	
2,100.0	2,079.7	2,041.6	2,024.3	6.0	5.2	-145.15	-215.9	58.7	392.9	384.2	8.71	45.110	
2,200.0	2,178.4	2,137.9	2,119.0	6.4	5.5	-144.93	-231.9	64.3	419.9	410.7	9.18	45.735	
2,300.0	2,277.2	2,234.2	2,213.8	6.7	5.9	-144.74	-248.0	69.8	447.0	437.3	9.65	46.298	
2,400.0	2,375.9	2,330.4	2,308.5	7.0	6.2	-144.57	-264.1	75.4	474.0	463.9	10.13	46.807	
2,500.0	2,474.6	2,426.7	2,403.3	7.4	6.5	-144.42	-280.2	80.9	501.0	490.4	10.60	47.271	
2,600.0	2,573.3	2,523.0	2,498.1	7.7	6.9	-144.29	-296.3	86.5	528.0	517.0	11.07	47.693	
2,700.0	2,672.1	2,619.3	2,592.8	8.0	7.2	-144.17	-312.3	92.0	555.1	543.5	11.54	48.081	
2,800.0	2,770.8	2,715.5	2,687.6	8.4	7.6	-144.06	-328.4	97.6	582.1	570.1	12.02	48.437	
2,900.0	2,869.5	2,811.8	2,782.3	8.7	7.9	-143.96	-344.5	103.2	609.1	596.7	12.49	48.766	
3,000.0	2,968.2	2,908.1	2,877.1	9.0	8.2	-143.87	-360.6	108.7	636.2	623.2	12.96	49.070	
3,100.0	3,067.0	3,004.3	2,971.8	9.3	8.6	-143.78	-376.7	114.3	663.2	649.8	13.44	49.353	
3,200.0	3,165.7	3,100.6	3,066.6	9.7	8.9	-143.70	-392.7	119.8	690.3	676.4	13.91	49.616	
3,300.0	3,264.4	3,196.9	3,161.3	10.0	9.2	-143.63	-408.8	125.4	717.3	702.9	14.39	49.861	
3,400.0	3,363.2	3,293.1	3,256.1	10.3	9.6	-143.57	-424.9	130.9	744.4	729.5	14.86	50.091	
3,500.0	3,461.9	3,389.4	3,350.9	10.7	9.9	-143.50	-441.0	136.5	771.4	756.1	15.33	50.306	
3,600.0	3,560.6	3,485.7	3,445.6	11.0	10.3	-143.45	-457.0	142.1	798.4	782.6	15.81	50.508	
3,700.0	3,659.3	3,582.0	3,540.4	11.3	10.6	-143.39	-473.1	147.6	825.5	809.2	16.28	50.698	
3,800.0	3,758.1	3,678.2	3,635.1	11.7	10.9	-143.34	-489.2	153.2	852.5	835.8	16.76	50.877	
3,900.0	3,856.8	3,774.5	3,729.9	12.0	11.3	-143.29	-505.3	158.7	879.6	862.4	17.23	51.046	
4,000.0	3,955.5	3,870.8	3,824.6	12.3	11.6	-143.25	-521.4	164.3	906.6	888.9	17.71	51.206	
4,100.0	4,054.2	3,967.0	3,919.4	12.6	12.0	-143.21	-537.4	169.8	933.7	915.5	18.18	51.358	
4,200.0	4,153.0	4,063.3	4,014.1	13.0	12.3	-143.17	-553.5	175.4	960.7	942.1	18.65	51.501	
4,300.0	4,251.7	4,159.6	4,108.9	13.3	12.6	-143.13	-569.6	181.0	987.8	968.7	19.13	51.638	
4,400.0	4,350.4	4,255.8	4,203.6	13.6	13.0	-143.09	-585.7	186.5	1,014.8	995.2	19.60	51.767	
4,500.0	4,449.2	4,352.1	4,298.4	14.0	13.3	-143.06	-601.8	192.1	1,041.9	1,021.8	20.08	51.891	
4,600.0	4,547.9	4,448.4	4,393.2	14.3	13.7	-143.03	-617.8	197.6	1,068.9	1,048.4	20.55	52.008	
4,700.0	4,646.6	4,544.7	4,487.9	14.6	14.0	-143.00	-633.9	203.2	1,096.0	1,075.0	21.03	52.121	
4,800.0	4,745.3	4,640.9	4,582.7	15.0	14.3	-142.97	-650.0	208.8	1,123.0	1,101.5	21.50	52.228	
4,900.0	4,844.1	4,737.2	4,677.4	15.3	14.7	-142.94	-666.1	214.3	1,150.1	1,128.1	21.98	52.331	
5,000.0	4,942.8	4,833.5	4,772.2	15.6	15.0	-142.92	-682.1	219.9	1,177.1	1,154.7	22.45	52.429	

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 OM02C 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:	OM02C 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
5,100.0	5,041.5	4,929.7	4,866.9	16.0	15.4	-142.89	-698.2	225.4	1,204.2	1,181.3	22.93	52.523	
5,200.0	5,140.2	5,026.0	4,961.7	16.3	15.7	-142.87	-714.3	231.0	1,231.2	1,207.8	23.40	52.613	
5,300.0	5,239.0	5,122.3	5,056.4	16.6	16.0	-142.84	-730.4	236.5	1,258.3	1,234.4	23.88	52.700	
5,400.0	5,337.7	5,218.5	5,151.2	16.9	16.4	-142.82	-746.5	242.1	1,285.4	1,261.0	24.35	52.783	
5,500.0	5,436.4	5,314.8	5,246.0	17.3	16.7	-142.80	-762.5	247.7	1,312.4	1,287.6	24.83	52.863	
5,600.0	5,535.2	5,411.1	5,340.7	17.6	17.1	-142.78	-778.6	253.2	1,339.5	1,314.2	25.30	52.940	
5,700.0	5,633.9	5,507.4	5,435.5	17.9	17.4	-142.76	-794.7	258.8	1,366.5	1,340.7	25.78	53.014	
5,800.0	5,732.6	5,603.6	5,530.2	18.3	17.8	-142.74	-810.8	264.3	1,393.6	1,367.3	26.25	53.085	

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C 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	-151.25	-8.7	-4.8	10.0				
100.0	100.0	100.0	100.0	0.1	0.1	-151.25	-8.7	-4.8	10.0	9.7	0.30	33.606	
200.0	200.0	200.0	200.0	0.3	0.3	-151.25	-8.7	-4.8	10.0	9.3	0.65	15.441	
300.0	300.0	300.0	300.0	0.5	0.5	-70.44	-8.7	-4.8	9.2	8.3	1.00	9.268	
330.6	330.6	330.5	330.5	0.6	0.6	-78.44	-8.9	-4.7	9.1	7.9	1.11	8.145	CC, ES
400.0	399.8	399.5	399.5	0.7	0.7	-104.51	-10.4	-4.2	10.7	9.3	1.37	7.834	SF
500.0	499.5	498.3	498.2	0.9	0.9	-130.41	-15.2	-2.5	20.1	18.4	1.74	11.596	
600.0	598.7	596.0	595.5	1.2	1.1	-139.84	-23.1	0.4	36.6	34.4	2.12	17.260	
700.0	697.5	692.2	690.9	1.5	1.3	-143.33	-34.0	4.3	58.6	56.1	2.52	23.226	
800.0	796.2	787.0	784.6	1.8	1.6	-143.89	-47.6	9.2	83.9	80.9	2.95	28.384	
900.0	895.0	880.4	876.4	2.1	1.9	-143.23	-63.9	15.0	111.7	108.3	3.41	32.792	
1,000.0	993.7	972.8	966.6	2.4	2.3	-142.13	-82.7	21.8	142.1	138.2	3.87	36.704	
1,100.0	1,092.4	1,067.7	1,059.0	2.8	2.7	-141.18	-103.1	29.1	173.5	169.2	4.35	39.874	
1,200.0	1,191.2	1,162.6	1,151.4	3.1	3.1	-140.52	-123.5	36.4	204.9	200.1	4.83	42.403	
1,300.0	1,289.9	1,257.5	1,243.8	3.4	3.5	-140.03	-143.9	43.8	236.4	231.1	5.32	44.457	
1,400.0	1,388.6	1,352.4	1,336.2	3.7	3.9	-139.66	-164.3	51.1	267.9	262.0	5.80	46.156	
1,500.0	1,487.3	1,447.3	1,428.6	4.1	4.3	-139.37	-184.7	58.4	299.3	293.0	6.29	47.584	
1,600.0	1,586.1	1,542.2	1,521.0	4.4	4.7	-139.13	-205.1	65.8	330.8	324.0	6.78	48.800	
1,700.0	1,684.8	1,637.1	1,613.4	4.7	5.1	-138.94	-225.5	73.1	362.3	355.0	7.27	49.847	
1,800.0	1,783.5	1,732.1	1,705.8	5.1	5.5	-138.77	-245.9	80.4	393.8	386.0	7.76	50.757	
1,900.0	1,882.2	1,827.0	1,798.2	5.4	5.9	-138.63	-266.3	87.7	425.2	417.0	8.25	51.556	
2,000.0	1,981.0	1,921.9	1,890.6	5.7	6.3	-138.51	-286.7	95.1	456.7	448.0	8.74	52.263	
2,100.0	2,079.7	2,016.8	1,983.0	6.0	6.7	-138.41	-307.1	102.4	488.2	479.0	9.23	52.893	
2,200.0	2,178.4	2,111.7	2,075.4	6.4	7.1	-138.31	-327.5	109.7	519.7	510.0	9.72	53.456	
2,300.0	2,277.2	2,206.6	2,167.8	6.7	7.5	-138.23	-347.8	117.1	551.2	541.0	10.21	53.965	
2,400.0	2,375.9	2,301.5	2,260.3	7.0	8.0	-138.16	-368.2	124.4	582.7	572.0	10.71	54.425	
2,500.0	2,474.6	2,396.4	2,352.7	7.4	8.4	-138.09	-388.6	131.7	614.2	603.0	11.20	54.844	
2,600.0	2,573.3	2,491.3	2,445.1	7.7	8.8	-138.03	-409.0	139.0	645.7	634.0	11.69	55.226	
2,700.0	2,672.1	2,586.2	2,537.5	8.0	9.2	-137.98	-429.4	146.4	677.1	665.0	12.18	55.577	
2,800.0	2,770.8	2,681.2	2,629.9	8.4	9.6	-137.93	-449.8	153.7	708.6	696.0	12.68	55.900	
2,900.0	2,869.5	2,776.1	2,722.3	8.7	10.0	-137.89	-470.2	161.0	740.1	727.0	13.17	56.198	
3,000.0	2,968.2	2,871.0	2,814.7	9.0	10.4	-137.84	-490.6	168.4	771.6	758.0	13.66	56.475	
3,100.0	3,067.0	2,965.9	2,907.1	9.3	10.8	-137.81	-511.0	175.7	803.1	789.0	14.16	56.731	
3,200.0	3,165.7	3,060.8	2,999.5	9.7	11.2	-137.77	-531.4	183.0	834.6	820.0	14.65	56.970	
3,300.0	3,264.4	3,155.7	3,091.9	10.0	11.7	-137.74	-551.8	190.3	866.1	851.0	15.14	57.193	
3,400.0	3,363.2	3,250.6	3,184.3	10.3	12.1	-137.71	-572.2	197.7	897.6	882.0	15.64	57.402	
3,500.0	3,461.9	3,345.5	3,276.7	10.7	12.5	-137.68	-592.6	205.0	929.1	913.0	16.13	57.598	
3,600.0	3,560.6	3,440.4	3,369.1	11.0	12.9	-137.65	-613.0	212.3	960.6	944.0	16.62	57.781	
3,700.0	3,659.3	3,535.3	3,461.5	11.3	13.3	-137.63	-633.4	219.6	992.1	975.0	17.12	57.955	
3,800.0	3,758.1	3,630.3	3,553.9	11.7	13.7	-137.61	-653.8	227.0	1,023.6	1,006.0	17.61	58.118	
3,900.0	3,856.8	3,725.2	3,646.3	12.0	14.1	-137.58	-674.2	234.3	1,055.1	1,037.0	18.11	58.272	
4,000.0	3,955.5	3,820.1	3,738.7	12.3	14.6	-137.56	-694.5	241.6	1,086.6	1,068.0	18.60	58.418	
4,100.0	4,054.2	3,915.0	3,831.1	12.6	15.0	-137.55	-714.9	249.0	1,118.1	1,099.0	19.09	58.556	
4,200.0	4,153.0	4,009.9	3,923.5	13.0	15.4	-137.53	-735.3	256.3	1,149.6	1,130.0	19.59	58.687	
4,300.0	4,251.7	4,104.8	4,015.9	13.3	15.8	-137.51	-755.7	263.6	1,181.1	1,161.0	20.08	58.811	
4,400.0	4,350.4	4,199.7	4,108.3	13.6	16.2	-137.49	-776.1	270.9	1,212.6	1,192.0	20.58	58.930	
4,500.0	4,449.2	4,294.6	4,200.7	14.0	16.6	-137.48	-796.5	278.3	1,244.0	1,223.0	21.07	59.042	
4,600.0	4,547.9	4,389.5	4,293.1	14.3	17.0	-137.46	-816.9	285.6	1,275.5	1,254.0	21.56	59.150	
4,700.0	4,646.6	4,484.4	4,385.5	14.6	17.4	-137.45	-837.3	292.9	1,307.0	1,285.0	22.06	59.253	
4,800.0	4,745.3	4,579.4	4,477.9	15.0	17.9	-137.44	-857.7	300.3	1,338.5	1,316.0	22.55	59.351	
4,900.0	4,844.1	4,674.3	4,570.3	15.3	18.3	-137.42	-878.1	307.6	1,370.0	1,347.0	23.05	59.444	

Cathedral Energy Services

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	**Local Co-ordinate Reference:**	Well OM02C 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:	OM02C 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	31.24	8.4	5.1	9.8				
100.0	100.0	100.0	100.0	0.1	0.1	31.24	8.4	5.1	9.8	9.5	0.30	33.005	
200.0	200.0	200.0	200.0	0.3	0.3	31.24	8.4	5.1	9.8	9.1	0.65	15.165	
234.9	234.9	235.0	235.0	0.4	0.4	123.63	8.2	5.2	9.8	9.0	0.77	12.720	CC, ES
300.0	300.0	300.1	300.1	0.5	0.5	138.27	6.8	5.8	10.1	9.1	1.00	10.120	SF
400.0	399.8	399.7	399.6	0.7	0.7	172.53	2.0	7.8	14.9	13.6	1.36	10.950	
500.0	499.5	498.3	497.8	0.9	0.9	-167.37	-5.9	11.2	27.6	25.8	1.74	15.857	
600.0	598.7	595.5	594.2	1.2	1.2	-158.52	-16.7	15.8	46.9	44.8	2.13	22.008	
700.0	697.5	690.7	688.3	1.5	1.5	-154.12	-30.2	21.6	72.0	69.4	2.55	28.179	
800.0	796.2	784.4	780.4	1.8	1.8	-151.03	-46.2	28.5	100.2	97.2	3.00	33.379	
900.0	895.0	876.5	870.2	2.1	2.2	-148.48	-64.7	36.4	131.0	127.6	3.46	37.820	
1,000.0	993.7	966.7	957.6	2.4	2.6	-146.29	-85.3	45.3	164.5	160.6	3.94	41.759	
1,100.0	1,092.4	1,055.9	1,043.2	2.8	3.1	-144.39	-108.2	55.1	200.6	196.2	4.42	45.398	
1,200.0	1,191.2	1,148.6	1,132.0	3.1	3.5	-142.87	-132.8	65.7	237.7	232.8	4.91	48.401	
1,300.0	1,289.9	1,241.3	1,220.7	3.4	4.0	-141.76	-157.5	76.3	274.9	269.5	5.40	50.878	
1,400.0	1,388.6	1,334.0	1,309.5	3.7	4.5	-140.91	-182.1	86.9	312.1	306.2	5.89	52.948	
1,500.0	1,487.3	1,426.7	1,398.2	4.1	5.0	-140.24	-206.8	97.5	349.4	343.0	6.39	54.702	
1,600.0	1,586.1	1,519.5	1,487.0	4.4	5.5	-139.71	-231.4	108.1	386.8	379.9	6.88	56.206	
1,700.0	1,684.8	1,612.2	1,575.7	4.7	6.0	-139.26	-256.1	118.6	424.1	416.7	7.37	57.510	
1,800.0	1,783.5	1,704.9	1,664.5	5.1	6.5	-138.89	-280.7	129.2	461.5	453.6	7.87	58.650	
1,900.0	1,882.2	1,797.6	1,753.2	5.4	7.0	-138.57	-305.4	139.8	498.9	490.5	8.36	59.655	
2,000.0	1,981.0	1,890.3	1,842.0	5.7	7.5	-138.30	-330.0	150.4	536.3	527.4	8.86	60.548	
2,100.0	2,079.7	1,983.0	1,930.7	6.0	8.0	-138.07	-354.7	161.0	573.7	564.4	9.35	61.346	
2,200.0	2,178.4	2,075.7	2,019.5	6.4	8.5	-137.86	-379.3	171.6	611.1	601.3	9.85	62.064	
2,300.0	2,277.2	2,168.4	2,108.2	6.7	8.9	-137.68	-404.0	182.1	648.6	638.2	10.34	62.713	
2,400.0	2,375.9	2,261.2	2,196.9	7.0	9.4	-137.51	-428.6	192.7	686.0	675.2	10.84	63.302	
2,500.0	2,474.6	2,353.9	2,285.7	7.4	9.9	-137.37	-453.3	203.3	723.4	712.1	11.33	63.840	
2,600.0	2,573.3	2,446.6	2,374.4	7.7	10.4	-137.23	-477.9	213.9	760.9	749.0	11.83	64.333	
2,700.0	2,672.1	2,539.3	2,463.2	8.0	10.9	-137.11	-502.5	224.5	798.3	786.0	12.32	64.786	
2,800.0	2,770.8	2,632.0	2,551.9	8.4	11.4	-137.00	-527.2	235.1	835.8	822.9	12.82	65.203	
2,900.0	2,869.5	2,724.7	2,640.7	8.7	11.9	-136.90	-551.8	245.6	873.2	859.9	13.31	65.590	
3,000.0	2,968.2	2,817.4	2,729.4	9.0	12.4	-136.81	-576.5	256.2	910.7	896.8	13.81	65.948	
3,100.0	3,067.0	2,910.1	2,818.2	9.3	12.9	-136.73	-601.1	266.8	948.1	933.8	14.30	66.282	
3,200.0	3,165.7	3,002.9	2,906.9	9.7	13.4	-136.65	-625.8	277.4	985.6	970.8	14.80	66.593	
3,300.0	3,264.4	3,095.6	2,995.7	10.0	13.9	-136.58	-650.4	288.0	1,023.0	1,007.7	15.30	66.884	
3,400.0	3,363.2	3,188.3	3,084.4	10.3	14.4	-136.51	-675.1	298.6	1,060.5	1,044.7	15.79	67.156	
3,500.0	3,461.9	3,281.0	3,173.2	10.7	14.9	-136.45	-699.7	309.1	1,097.9	1,081.6	16.29	67.412	
3,600.0	3,560.6	3,373.7	3,261.9	11.0	15.4	-136.39	-724.4	319.7	1,135.4	1,118.6	16.78	67.653	
3,700.0	3,659.3	3,466.4	3,350.7	11.3	15.9	-136.34	-749.0	330.3	1,172.9	1,155.6	17.28	67.880	
3,800.0	3,758.1	3,559.1	3,439.4	11.7	16.4	-136.28	-773.7	340.9	1,210.3	1,192.5	17.77	68.094	
3,900.0	3,856.8	3,651.9	3,528.2	12.0	16.9	-136.24	-798.3	351.5	1,247.8	1,229.5	18.27	68.296	
4,000.0	3,955.5	3,744.6	3,616.9	12.3	17.4	-136.19	-822.9	362.1	1,285.2	1,266.5	18.77	68.488	
4,100.0	4,054.2	3,837.3	3,705.7	12.6	17.9	-136.15	-847.6	372.7	1,322.7	1,303.4	19.26	68.670	
4,200.0	4,153.0	3,930.0	3,794.4	13.0	18.4	-136.11	-872.2	383.2	1,360.2	1,340.4	19.76	68.842	
4,300.0	4,251.7	4,022.7	3,883.2	13.3	18.9	-136.07	-896.9	393.8	1,397.6	1,377.4	20.25	69.007	

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Reference Well:	OM02C 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: OM02C 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°