

SandRidge Energy

North Park Basin

T7N-R80W-S17

Hebron 0780 4-7H

Wellbore #1

Design #1

Anticollision Report

16 December, 2015

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Reference	Design #1			
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		WARNING: There is hidden tight data in this project	
Interpolation Method:	Stations	Error Model:		ISCWSA
Depth Range:	Unlimited	Scan Method:		Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 usft	Error Surface:		Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:		Not applied

Survey Tool Program		Date	12/16/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,117.4	Design #1 (Wellbore #1)	Sperry MWD	Fixed:v2:standard declination	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
T7N-R80W-S17						
Castle 0780 1-17H20 - Wellbore #1 - Design #1	500.0	497.0	226.3	224.3	114.482	CC
Castle 0780 1-17H20 - Wellbore #1 - Design #1	3,500.0	3,498.4	236.3	221.2	15.654	ES
Castle 0780 1-17H20 - Wellbore #1 - Design #1	3,900.0	3,897.1	249.3	232.5	14.842	SF
Castle 0780 2-17H20 - Wellbore #1 - Design #1	500.0	497.0	241.6	239.6	122.221	CC, ES
Castle 0780 2-17H20 - Wellbore #1 - Design #1	3,800.0	3,797.1	270.9	254.5	16.559	SF
Castle 0780 3-17H20 - Wellbore #1 - Design #1	500.0	497.0	257.6	255.6	130.296	CC, ES
Castle 0780 3-17H20 - Wellbore #1 - Design #1	3,800.0	3,796.8	290.7	274.2	17.673	SF
Castle 0780 4-17H20 - Wellbore #1 - Design #1	500.0	497.0	274.1	272.1	138.662	CC, ES
Castle 0780 4-17H20 - Wellbore #1 - Design #1	3,800.0	3,796.9	311.4	294.9	18.926	SF
Hebron 0780 3-18H - Wellbore #1 - Design #1	5,268.7	5,256.3	35.6	12.3	1.527	Level 4, CC
Hebron 0780 3-18H - Wellbore #1 - Design #1	5,300.0	5,287.4	35.8	11.9	1.502	Level 4, ES
Hebron 0780 3-18H - Wellbore #1 - Design #1	5,400.0	5,386.7	38.6	12.6	1.485	Level 3, SF
Hebron 0780 4-18H - Wellbore #1 - Design #1	3,500.0	3,497.5	192.0	176.8	12.609	CC, ES
Hebron 0780 4-18H - Wellbore #1 - Design #1	6,850.0	6,957.4	316.8	282.1	9.121	SF
Mutual 0780 2-8H - Wellbore #1 - Design #1	3,500.0	3,497.0	149.8	134.3	9.685	CC, ES
Mutual 0780 2-8H - Wellbore #1 - Design #1	12,117.8	11,853.4	699.8	503.9	3.573	SF
Mutual 0780 3-8H - Wellbore #1 - Design #1	500.0	497.0	169.8	167.8	85.880	CC, ES
Mutual 0780 3-8H - Wellbore #1 - Design #1	12,117.8	11,931.2	2,000.3	1,805.5	10.268	SF
Mutual 0780 4-8H - Wellbore #1 - Design #1	500.0	497.0	189.7	187.8	95.978	CC, ES
Mutual 0780 4-8H - Wellbore #1 - Design #1	12,117.8	12,370.7	2,660.6	2,465.2	13.616	SF
Mutual 7-17H - Wellbore #1 - Wellbore #1	4,499.1	4,480.3	220.7	202.0	11.827	CC
Mutual 7-17H - Wellbore #1 - Wellbore #1	4,500.0	4,481.1	220.7	202.0	11.824	ES
Mutual 7-17H - Wellbore #1 - Wellbore #1	4,700.0	4,671.1	229.2	209.4	11.568	SF

Offset Design											T7N-R80W-S17 - Castle 0780 1-17H20 - Wellbore #1 - Design #1		Offset Site Error:		0.0 usft	
Survey Program:											0-Sperry MWD		Offset Well Error:		0.0 usft	
Reference		Offset		Semi Major Axis			Distance					Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)			Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	132.29	-152.3	167.4	226.3							
100.0	100.0	97.0	97.0	0.1	0.1	132.29	-152.3	167.4	226.3	226.1	0.18	1,239.379				
200.0	200.0	197.0	197.0	0.3	0.3	132.29	-152.3	167.4	226.3	225.7	0.63	360.241				
300.0	300.0	297.0	297.0	0.5	0.5	132.29	-152.3	167.4	226.3	225.2	1.08	209.984				
400.0	400.0	397.0	397.0	0.8	0.8	132.29	-152.3	167.4	226.3	224.8	1.53	148.178				

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

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Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 1-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
500.0	500.0	497.0	497.0	1.0	1.0	132.29	-152.3	167.4	226.3	224.3	1.98	114.482 CC		
600.0	600.0	596.2	596.2	1.2	1.2	132.70	-153.6	166.4	226.5	224.1	2.40	94.283		
700.0	700.0	695.5	695.3	1.4	1.4	133.95	-157.6	163.5	227.0	224.2	2.82	80.523		
800.0	800.0	795.3	794.9	1.7	1.6	135.45	-162.4	159.8	227.9	224.6	3.24	70.286		
900.0	900.0	895.1	894.6	1.9	1.8	136.94	-167.2	156.2	228.8	225.2	3.67	62.321		
1,000.0	1,000.0	994.9	994.2	2.1	2.0	138.42	-172.0	152.6	230.0	225.9	4.11	55.972		
1,100.0	1,100.0	1,094.7	1,093.9	2.3	2.3	139.88	-176.8	149.0	231.3	226.7	4.55	50.819		
1,200.0	1,200.0	1,194.5	1,193.5	2.6	2.5	141.33	-181.7	145.4	232.7	227.7	5.00	46.571		
1,300.0	1,300.0	1,294.4	1,293.1	2.8	2.7	142.75	-186.5	141.8	234.3	228.8	5.45	43.019		
1,400.0	1,400.0	1,395.8	1,394.4	3.0	3.0	144.00	-190.7	138.6	235.8	229.9	5.89	40.020		
1,500.0	1,500.0	1,498.3	1,496.9	3.2	3.2	144.45	-192.3	137.4	236.3	230.0	6.33	37.361		
1,600.0	1,600.0	1,598.4	1,597.0	3.5	3.4	144.45	-192.3	137.4	236.3	229.6	6.76	34.986		
1,700.0	1,700.0	1,698.4	1,697.0	3.7	3.6	144.45	-192.3	137.4	236.3	229.2	7.18	32.905		
1,800.0	1,800.0	1,798.4	1,797.0	3.9	3.8	144.45	-192.3	137.4	236.3	228.7	7.61	31.047		
1,900.0	1,900.0	1,898.4	1,897.0	4.1	4.0	144.45	-192.3	137.4	236.3	228.3	8.04	29.379		
2,000.0	2,000.0	1,998.4	1,997.0	4.4	4.2	144.45	-192.3	137.4	236.3	227.9	8.48	27.876		
2,100.0	2,100.0	2,098.4	2,097.0	4.6	4.4	144.45	-192.3	137.4	236.3	227.4	8.91	26.514		
2,200.0	2,200.0	2,198.4	2,197.0	4.8	4.6	144.45	-192.3	137.4	236.3	227.0	9.35	25.276		
2,300.0	2,300.0	2,298.4	2,297.0	5.0	4.8	144.45	-192.3	137.4	236.3	226.5	9.79	24.145		
2,400.0	2,400.0	2,398.4	2,397.0	5.3	5.0	144.45	-192.3	137.4	236.3	226.1	10.23	23.109		
2,500.0	2,500.0	2,498.4	2,497.0	5.5	5.2	144.45	-192.3	137.4	236.3	225.7	10.67	22.156		
2,600.0	2,600.0	2,598.4	2,597.0	5.7	5.5	144.45	-192.3	137.4	236.3	225.2	11.11	21.277		
2,700.0	2,700.0	2,698.4	2,697.0	5.9	5.7	144.45	-192.3	137.4	236.3	224.8	11.55	20.464		
2,800.0	2,800.0	2,798.4	2,797.0	6.2	5.9	144.45	-192.3	137.4	236.3	224.3	11.99	19.710		
2,900.0	2,900.0	2,898.4	2,897.0	6.4	6.1	144.45	-192.3	137.4	236.3	223.9	12.43	19.008		
3,000.0	3,000.0	2,998.4	2,997.0	6.6	6.3	144.45	-192.3	137.4	236.3	223.5	12.88	18.354		
3,100.0	3,100.0	3,098.4	3,097.0	6.8	6.5	144.45	-192.3	137.4	236.3	223.0	13.32	17.743		
3,200.0	3,200.0	3,198.4	3,197.0	7.1	6.8	144.45	-192.3	137.4	236.3	222.6	13.76	17.171		
3,300.0	3,300.0	3,298.4	3,297.0	7.3	7.0	144.45	-192.3	137.4	236.3	222.1	14.21	16.634		
3,400.0	3,400.0	3,398.4	3,397.0	7.5	7.2	144.45	-192.3	137.4	236.3	221.7	14.65	16.129		
3,500.0	3,500.0	3,498.4	3,497.0	7.7	7.4	144.45	-192.3	137.4	236.3	221.2	15.10	15.654 ES		
3,600.0	3,600.0	3,598.4	3,597.0	7.9	7.6	-115.19	-192.3	137.4	237.1	221.5	15.57	15.228		
3,700.0	3,699.8	3,698.2	3,696.8	8.1	7.8	-116.29	-192.3	137.4	239.4	223.4	15.98	14.980		
3,800.0	3,799.5	3,797.9	3,796.5	8.3	8.1	-118.05	-192.3	137.4	243.3	227.0	16.39	14.849		
3,900.0	3,898.7	3,897.1	3,895.7	8.6	8.3	-120.40	-192.3	137.4	249.3	232.5	16.80	14.842 SF		
4,000.0	3,997.5	3,995.9	3,994.5	8.8	8.5	-123.24	-192.3	137.4	257.7	240.4	17.21	14.972		
4,100.0	4,095.6	4,094.0	4,092.6	9.0	8.7	-126.43	-192.3	137.4	268.7	251.1	17.62	15.251		
4,200.0	4,193.1	4,191.5	4,190.1	9.3	8.9	-129.82	-192.3	137.4	282.8	264.8	18.02	15.692		
4,300.0	4,289.6	4,288.0	4,286.6	9.6	9.1	-133.29	-192.3	137.4	300.3	281.9	18.42	16.304		
4,406.0	4,391.0	4,389.4	4,388.0	10.0	9.4	-136.91	-192.3	137.4	322.9	304.0	18.83	17.144		
4,500.0	4,480.3	4,478.7	4,477.3	10.3	9.6	-140.16	-192.3	137.4	345.3	326.0	19.25	17.939		
4,600.0	4,575.4	4,573.8	4,572.4	10.7	9.8	-143.20	-192.3	137.4	370.1	350.4	19.69	18.798		
4,700.0	4,670.4	4,668.8	4,667.4	11.2	10.0	-145.85	-192.3	137.4	395.9	375.7	20.14	19.658		
4,800.0	4,765.4	4,763.8	4,762.4	11.6	10.2	-148.19	-192.3	137.4	422.4	401.8	20.59	20.514		
4,900.0	4,860.5	4,858.9	4,857.5	12.1	10.4	-150.25	-192.3	137.4	449.4	428.4	21.04	21.358		
5,000.0	4,955.5	4,953.9	4,952.5	12.6	10.6	-152.09	-192.3	137.4	477.0	455.5	21.50	22.187		
5,100.0	5,050.6	5,049.0	5,047.6	13.1	10.8	-153.72	-192.3	137.4	505.0	483.0	21.96	22.998		
5,200.0	5,145.6	5,144.0	5,142.6	13.7	11.0	-155.19	-192.3	137.4	533.3	510.9	22.42	23.789		
5,300.0	5,240.6	5,239.0	5,237.6	14.2	11.3	-156.51	-192.3	137.4	561.9	539.0	22.88	24.559		
5,400.0	5,335.7	5,334.1	5,332.7	14.7	11.5	-157.71	-192.3	137.4	590.8	567.4	23.34	25.307		
5,500.0	5,430.7	5,429.1	5,427.7	15.3	11.7	-158.79	-192.3	137.4	619.8	596.0	23.81	26.032		
5,600.0	5,525.8	5,530.3	5,528.9	15.9	11.9	-159.83	-192.3	137.3	649.0	624.7	24.29	26.723		

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

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Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 1-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,700.0	5,620.8	5,652.1	5,650.6	16.4	12.2	-160.84	-193.4	133.6	675.7	650.9	24.79	27.255		
5,800.0	5,715.8	5,776.7	5,774.8	17.0	12.4	-161.60	-195.8	124.6	698.6	673.3	25.31	27.605		
5,900.0	5,810.9	5,903.7	5,901.0	17.6	12.7	-162.14	-199.8	110.1	717.6	691.8	25.85	27.766		
6,000.0	5,905.9	6,032.8	6,028.4	18.2	13.0	-162.49	-205.4	89.9	732.6	706.2	26.41	27.744		
6,100.0	6,001.0	6,149.2	6,142.3	18.8	13.3	-162.66	-211.7	67.3	743.9	717.0	26.96	27.592		
6,200.0	6,096.0	6,248.6	6,239.6	19.4	13.6	-162.77	-217.2	47.3	754.6	727.1	27.49	27.451		
6,300.0	6,191.0	6,348.0	6,336.8	20.0	13.9	-162.88	-222.8	27.2	765.2	737.2	28.02	27.310		
6,400.0	6,286.1	6,447.5	6,434.0	20.6	14.2	-162.99	-228.3	7.2	775.8	747.3	28.55	27.170		
6,500.0	6,381.1	6,548.0	6,532.3	21.2	14.5	-163.04	-234.7	-13.2	786.5	757.4	29.10	27.026		
6,541.3	6,420.4	6,590.5	6,573.4	21.5	14.6	-162.81	-240.7	-22.2	790.8	761.4	29.35	26.941		
6,550.0	6,428.7	6,599.4	6,581.9	21.5	14.6	-165.36	-242.4	-24.1	791.7	762.3	29.40	26.927		
6,600.0	6,476.4	6,648.9	6,628.7	21.8	14.8	179.17	-254.1	-35.1	796.7	767.0	29.71	26.820		
6,650.0	6,524.2	6,694.6	6,670.8	22.0	15.0	163.90	-268.4	-45.4	801.8	771.8	30.03	26.703		
6,700.0	6,571.6	6,735.0	6,706.9	22.2	15.1	150.88	-283.9	-54.8	807.6	777.2	30.34	26.617		
6,750.0	6,618.4	6,769.4	6,736.6	22.4	15.2	140.82	-299.2	-62.8	814.4	783.8	30.61	26.609		
6,800.0	6,664.1	6,800.0	6,762.3	22.6	15.4	133.39	-314.3	-70.1	822.9	792.1	30.83	26.695		
6,850.0	6,708.4	6,820.1	6,778.6	22.7	15.5	127.40	-324.9	-74.8	833.5	802.5	30.94	26.934		
6,900.0	6,751.0	6,837.2	6,792.2	22.9	15.6	122.58	-334.4	-78.9	846.3	815.3	31.02	27.284		
6,950.0	6,791.5	6,850.0	6,802.3	23.0	15.6	118.34	-341.8	-81.9	861.6	830.5	31.06	27.740		
7,000.0	6,829.7	6,850.0	6,802.3	23.1	15.6	113.75	-341.8	-81.9	879.3	848.3	31.04	28.326		
7,050.0	6,865.2	6,862.5	6,811.9	23.2	15.7	110.34	-349.3	-84.9	899.2	868.1	31.15	28.867		
7,100.0	6,897.8	6,864.2	6,813.1	23.3	15.7	106.35	-350.3	-85.3	921.2	890.0	31.25	29.483		
7,150.0	6,927.2	6,863.2	6,812.4	23.4	15.7	102.28	-349.7	-85.0	945.0	913.6	31.38	30.117		
7,189.8	6,948.2	6,850.0	6,802.3	23.4	15.6	98.25	-341.8	-81.9	965.0	933.6	31.44	30.692		
7,200.0	6,953.3	6,850.0	6,802.3	23.4	15.6	98.25	-341.8	-81.9	970.3	938.8	31.48	30.825		
7,300.0	7,003.3	6,850.0	6,802.3	23.6	15.6	98.25	-341.8	-81.9	1,025.7	993.8	31.88	32.169		
7,339.8	7,023.2	6,850.0	6,802.3	23.7	15.6	98.25	-341.8	-81.9	1,049.5	1,017.4	32.09	32.709		
7,350.0	7,028.3	6,850.0	6,802.3	23.7	15.6	97.43	-341.8	-81.9	1,055.8	1,023.7	32.15	32.839		
7,400.0	7,050.6	6,850.0	6,802.3	23.9	15.6	93.22	-341.8	-81.9	1,087.6	1,055.1	32.49	33.477		
7,450.0	7,068.9	6,850.0	6,802.3	24.1	15.6	88.72	-341.8	-81.9	1,120.8	1,088.0	32.80	34.173		
7,500.0	7,083.0	6,833.5	6,789.3	24.3	15.5	83.01	-332.3	-78.0	1,154.7	1,121.8	32.89	35.110		
7,550.0	7,093.0	6,825.3	6,782.8	24.6	15.5	77.84	-327.8	-76.1	1,189.2	1,156.4	32.83	36.219		
7,600.0	7,098.7	6,816.2	6,775.5	24.8	15.5	72.74	-322.8	-73.9	1,223.9	1,191.4	32.56	37.589		
7,640.0	7,100.0	6,800.0	6,762.3	25.1	15.4	68.45	-314.3	-70.1	1,251.7	1,219.5	32.12	38.971		
7,700.0	7,100.0	6,800.0	6,762.3	25.5	15.4	68.45	-314.3	-70.1	1,293.5	1,260.8	32.71	39.551		
7,800.0	7,100.0	6,778.0	6,743.9	26.4	15.3	67.50	-303.3	-64.9	1,365.8	1,332.3	33.55	40.711		
7,900.0	7,100.0	6,750.0	6,720.0	27.3	15.2	66.30	-290.4	-58.3	1,441.0	1,406.6	34.41	41.878		
8,000.0	7,100.0	6,750.0	6,720.0	28.4	15.2	66.30	-290.4	-58.3	1,518.3	1,482.6	35.65	42.589		
8,100.0	7,100.0	6,750.0	6,720.0	29.6	15.2	66.30	-290.4	-58.3	1,598.1	1,561.1	36.96	43.237		
8,200.0	7,100.0	6,721.3	6,694.8	30.8	15.1	65.07	-278.4	-51.6	1,679.2	1,641.3	37.99	44.208		
8,300.0	7,100.0	6,700.0	6,675.7	32.2	15.0	64.16	-270.4	-46.7	1,762.4	1,723.3	39.12	45.047		
8,400.0	7,100.0	6,700.0	6,675.7	33.6	15.0	64.16	-270.4	-46.7	1,846.8	1,806.3	40.57	45.527		
8,500.0	7,100.0	6,700.0	6,675.7	35.0	15.0	64.16	-270.4	-46.7	1,932.8	1,890.7	42.04	45.969		
8,600.0	7,100.0	6,700.0	6,675.7	36.5	15.0	64.16	-270.4	-46.7	2,020.0	1,976.4	43.55	46.379		
8,700.0	7,100.0	6,674.2	6,652.2	38.1	14.9	63.08	-261.6	-40.8	2,107.6	2,062.9	44.71	47.139		
8,800.0	7,100.0	6,650.0	6,629.7	39.7	14.8	62.06	-254.4	-35.3	2,196.8	2,151.0	45.89	47.876		
8,900.0	7,100.0	6,650.0	6,629.7	41.3	14.8	62.06	-254.4	-35.3	2,286.4	2,239.0	47.44	48.198		
9,000.0	7,100.0	6,650.0	6,629.7	42.9	14.8	62.06	-254.4	-35.3	2,376.8	2,327.8	49.01	48.500		
9,100.0	7,100.0	6,650.0	6,629.7	44.6	14.8	62.06	-254.4	-35.3	2,467.9	2,417.3	50.59	48.783		
9,200.0	7,100.0	6,650.0	6,629.7	46.3	14.8	62.06	-254.4	-35.3	2,559.7	2,507.5	52.18	49.050		
9,300.0	7,100.0	6,650.0	6,629.7	48.0	14.8	62.06	-254.4	-35.3	2,652.1	2,598.3	53.79	49.302		
9,400.0	7,100.0	6,650.0	6,629.7	49.7	14.8	62.06	-254.4	-35.3	2,745.0	2,689.6	55.41	49.540		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 1-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,500.0	7,100.0	6,627.8	6,608.9	51.4	14.7	61.15	-248.6	-30.3	2,837.9	2,781.3	56.62	50.126		
9,600.0	7,100.0	6,623.5	6,604.8	53.2	14.7	60.97	-247.5	-29.4	2,931.5	2,873.4	58.15	50.410		
9,700.0	7,100.0	6,600.0	6,582.4	54.9	14.6	60.02	-242.5	-24.2	3,025.9	2,966.6	59.31	51.021		
9,800.0	7,100.0	6,600.0	6,582.4	56.7	14.6	60.02	-242.5	-24.2	3,120.1	3,059.2	60.93	51.210		
9,900.0	7,100.0	6,600.0	6,582.4	58.5	14.6	60.02	-242.5	-24.2	3,214.7	3,152.1	62.55	51.390		
10,000.0	7,100.0	6,600.0	6,582.4	60.2	14.6	60.02	-242.5	-24.2	3,309.6	3,245.4	64.19	51.562		
10,100.0	7,100.0	6,600.0	6,582.4	62.0	14.6	60.02	-242.5	-24.2	3,404.7	3,338.9	65.82	51.726		
10,200.0	7,100.0	6,600.0	6,582.4	63.8	14.6	60.02	-242.5	-24.2	3,500.2	3,432.7	67.46	51.883		
10,300.0	7,100.0	6,600.0	6,582.4	65.7	14.6	60.02	-242.5	-24.2	3,595.9	3,526.8	69.11	52.033		
10,400.0	7,100.0	6,600.0	6,582.4	67.5	14.6	60.02	-242.5	-24.2	3,691.8	3,621.0	70.76	52.176		
10,500.0	7,100.0	6,600.0	6,582.4	69.3	14.6	60.02	-242.5	-24.2	3,787.9	3,715.5	72.41	52.314		
10,600.0	7,100.0	6,600.0	6,582.4	71.1	14.6	60.02	-242.5	-24.2	3,884.3	3,810.2	74.06	52.446		
10,700.0	7,100.0	6,600.0	6,582.4	73.0	14.6	60.02	-242.5	-24.2	3,980.8	3,905.0	75.72	52.572		
10,800.0	7,100.0	6,600.0	6,582.4	74.8	14.6	60.02	-242.5	-24.2	4,077.4	4,000.1	77.38	52.694		
10,900.0	7,100.0	6,600.0	6,582.4	76.6	14.6	60.02	-242.5	-24.2	4,174.3	4,095.2	79.04	52.811		
11,000.0	7,100.0	6,600.0	6,582.4	78.5	14.6	60.02	-242.5	-24.2	4,271.3	4,190.6	80.71	52.923		
11,100.0	7,100.0	6,600.0	6,582.4	80.3	14.6	60.02	-242.5	-24.2	4,368.4	4,286.0	82.37	53.032		
11,200.0	7,100.0	6,600.0	6,582.4	82.2	14.6	60.02	-242.5	-24.2	4,465.6	4,381.6	84.04	53.136		
11,300.0	7,100.0	6,576.4	6,559.7	84.0	14.6	59.08	-238.4	-19.2	4,562.5	4,477.4	85.03	53.660		
11,400.0	7,100.0	6,574.6	6,558.0	85.9	14.6	59.01	-238.1	-18.8	4,659.8	4,573.2	86.63	53.790		
11,500.0	7,100.0	6,572.8	6,556.3	87.7	14.6	58.94	-237.8	-18.4	4,757.3	4,669.1	88.24	53.915		
11,600.0	7,100.0	6,550.0	6,534.2	89.6	14.5	58.05	-234.9	-13.6	4,855.4	4,766.2	89.19	54.436		
11,700.0	7,100.0	6,550.0	6,534.2	91.5	14.5	58.05	-234.9	-13.6	4,953.0	4,862.1	90.84	54.523		
11,800.0	7,100.0	6,550.0	6,534.2	93.3	14.5	58.05	-234.9	-13.6	5,050.7	4,958.2	92.49	54.608		
11,900.0	7,100.0	6,550.0	6,534.2	95.2	14.5	58.05	-234.9	-13.6	5,148.5	5,054.3	94.14	54.689		
12,000.0	7,100.0	6,550.0	6,534.2	97.1	14.5	58.05	-234.9	-13.6	5,246.4	5,150.6	95.79	54.768		
12,100.0	7,100.0	6,550.0	6,534.2	99.0	14.5	58.05	-234.9	-13.6	5,344.3	5,246.9	97.45	54.844		
12,117.8	7,100.0	6,550.0	6,534.2	99.3	14.5	58.05	-234.9	-13.6	5,361.8	5,264.1	97.68	54.892		

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 2-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	129.16	-152.6	187.3	241.6					
100.0	100.0	97.0	97.0	0.1	0.1	129.16	-152.6	187.3	241.6	241.4	0.18	1,323.159		
200.0	200.0	197.0	197.0	0.3	0.3	129.16	-152.6	187.3	241.6	241.0	0.63	384.592		
300.0	300.0	297.0	297.0	0.5	0.5	129.16	-152.6	187.3	241.6	240.5	1.08	224.178		
400.0	400.0	397.0	397.0	0.8	0.8	129.16	-152.6	187.3	241.6	240.1	1.53	158.195		
500.0	500.0	497.0	497.0	1.0	1.0	129.16	-152.6	187.3	241.6	239.6	1.98	122.221	CC, ES	
600.0	600.0	592.1	592.0	1.2	1.2	129.43	-154.1	187.3	242.6	240.2	2.39	101.484		
700.0	700.0	690.0	689.9	1.4	1.4	130.18	-158.2	187.3	245.3	242.5	2.80	87.667		
800.0	800.0	789.9	789.7	1.7	1.6	130.97	-162.7	187.3	248.2	245.0	3.22	77.095		
900.0	900.0	889.8	889.5	1.9	1.8	131.74	-167.1	187.3	251.2	247.5	3.65	68.797		
1,000.0	1,000.0	989.7	989.3	2.1	2.0	132.48	-171.6	187.3	254.1	250.1	4.09	62.155		
1,100.0	1,100.0	1,089.6	1,089.1	2.3	2.2	133.22	-176.0	187.3	257.2	252.6	4.53	56.745		
1,200.0	1,200.0	1,190.7	1,190.1	2.6	2.4	133.93	-180.5	187.3	260.2	255.2	4.98	52.250		
1,300.0	1,300.0	1,297.4	1,296.8	2.8	2.7	134.26	-182.6	187.3	261.6	256.2	5.43	48.184		
1,400.0	1,400.0	1,397.6	1,397.0	3.0	2.9	134.26	-182.6	187.3	261.6	255.7	5.86	44.638		
1,500.0	1,500.0	1,497.6	1,497.0	3.2	3.1	134.26	-182.6	187.3	261.6	255.3	6.29	41.594		
1,600.0	1,600.0	1,597.6	1,597.0	3.5	3.3	134.26	-182.6	187.3	261.6	254.9	6.72	38.924		
1,700.0	1,700.0	1,697.6	1,697.0	3.7	3.5	134.26	-182.6	187.3	261.6	254.4	7.15	36.565		
1,800.0	1,800.0	1,797.6	1,797.0	3.9	3.7	134.26	-182.6	187.3	261.6	254.0	7.59	34.466		
1,900.0	1,900.0	1,897.6	1,897.0	4.1	3.9	134.26	-182.6	187.3	261.6	253.6	8.03	32.590		
2,000.0	2,000.0	1,997.6	1,997.0	4.4	4.1	134.26	-182.6	187.3	261.6	253.1	8.47	30.902		
2,100.0	2,100.0	2,097.6	2,097.0	4.6	4.3	134.26	-182.6	187.3	261.6	252.7	8.90	29.376		
2,200.0	2,200.0	2,197.6	2,197.0	4.8	4.5	134.26	-182.6	187.3	261.6	252.2	9.35	27.992		
2,300.0	2,300.0	2,297.6	2,297.0	5.0	4.8	134.26	-182.6	187.3	261.6	251.8	9.79	26.729		
2,400.0	2,400.0	2,397.6	2,397.0	5.3	5.0	134.26	-182.6	187.3	261.6	251.4	10.23	25.574		
2,500.0	2,500.0	2,497.6	2,497.0	5.5	5.2	134.26	-182.6	187.3	261.6	250.9	10.67	24.513		
2,600.0	2,600.0	2,597.6	2,597.0	5.7	5.4	134.26	-182.6	187.3	261.6	250.5	11.11	23.535		
2,700.0	2,700.0	2,697.6	2,697.0	5.9	5.6	134.26	-182.6	187.3	261.6	250.0	11.56	22.632		
2,800.0	2,800.0	2,797.6	2,797.0	6.2	5.8	134.26	-182.6	187.3	261.6	249.6	12.00	21.794		
2,900.0	2,900.0	2,897.6	2,897.0	6.4	6.1	134.26	-182.6	187.3	261.6	249.1	12.45	21.016		
3,000.0	3,000.0	2,997.6	2,997.0	6.6	6.3	134.26	-182.6	187.3	261.6	248.7	12.89	20.290		
3,100.0	3,100.0	3,097.6	3,097.0	6.8	6.5	134.26	-182.6	187.3	261.6	248.3	13.34	19.613		
3,200.0	3,200.0	3,197.6	3,197.0	7.1	6.7	134.26	-182.6	187.3	261.6	247.8	13.78	18.979		
3,300.0	3,300.0	3,297.6	3,297.0	7.3	6.9	134.26	-182.6	187.3	261.6	247.4	14.23	18.384		
3,400.0	3,400.0	3,397.6	3,397.0	7.5	7.2	134.26	-182.6	187.3	261.6	246.9	14.67	17.826		
3,500.0	3,500.0	3,497.6	3,497.0	7.7	7.4	134.26	-182.6	187.3	261.6	246.5	15.12	17.300		
3,600.0	3,600.0	3,597.6	3,597.0	7.9	7.6	-125.31	-182.6	187.3	262.6	247.1	15.55	16.892		
3,700.0	3,699.8	3,697.5	3,696.8	8.1	7.8	-126.18	-182.6	187.3	265.7	249.7	15.95	16.652		
3,800.0	3,799.5	3,797.1	3,796.5	8.3	8.1	-127.58	-182.6	187.3	270.9	254.5	16.36	16.559	SF	
3,900.0	3,898.7	3,896.3	3,895.7	8.6	8.3	-129.44	-182.6	187.3	278.5	261.8	16.76	16.615		
4,000.0	3,997.5	3,995.1	3,994.5	8.8	8.5	-131.67	-182.6	187.3	288.8	271.6	17.16	16.824		
4,100.0	4,095.6	4,093.2	4,092.6	9.0	8.7	-134.16	-182.6	187.3	301.9	284.3	17.56	17.192		
4,200.0	4,193.1	4,190.7	4,190.1	9.3	8.9	-136.81	-182.6	187.3	318.1	300.2	17.95	17.722		
4,300.0	4,289.6	4,287.3	4,286.6	9.6	9.1	-139.51	-182.6	187.3	337.7	319.4	18.34	18.418		
4,406.0	4,391.0	4,388.6	4,388.0	10.0	9.4	-142.35	-182.6	187.3	362.3	343.6	18.73	19.338		
4,500.0	4,480.3	4,477.9	4,477.3	10.3	9.6	-144.95	-182.6	187.3	386.3	367.1	19.15	20.172		
4,600.0	4,575.4	4,573.0	4,572.4	10.7	9.8	-147.40	-182.6	187.3	412.5	392.9	19.59	21.052		
4,700.0	4,670.4	4,668.0	4,667.4	11.2	10.0	-149.56	-182.6	187.3	439.4	419.3	20.05	21.919		
4,800.0	4,765.4	4,763.1	4,762.4	11.6	10.2	-151.47	-182.6	187.3	466.8	446.3	20.50	22.771		
4,900.0	4,860.5	4,858.1	4,857.5	12.1	10.4	-153.18	-182.6	187.3	494.6	473.7	20.96	23.603		
5,000.0	4,955.5	4,953.1	4,952.5	12.6	10.6	-154.70	-182.6	187.3	522.8	501.4	21.42	24.413		
5,100.0	5,050.6	5,048.2	5,047.6	13.1	10.8	-156.07	-182.6	187.3	551.3	529.5	21.88	25.201		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 2-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,145.6	5,143.2	5,142.6	13.7	11.1	-157.31	-182.6	187.3	580.1	557.8	22.34	25.966		
5,300.0	5,240.6	5,238.3	5,237.6	14.2	11.3	-158.43	-182.6	187.3	609.1	586.3	22.81	26.707		
5,400.0	5,335.7	5,333.3	5,332.7	14.7	11.5	-159.45	-182.6	187.3	638.3	615.1	23.28	27.425		
5,500.0	5,430.7	5,428.3	5,427.7	15.3	11.7	-160.38	-182.6	187.3	667.7	644.0	23.75	28.119		
5,600.0	5,525.8	5,523.4	5,522.8	15.9	11.9	-161.23	-182.6	187.3	697.2	673.0	24.22	28.790		
5,700.0	5,620.8	5,618.4	5,617.8	16.4	12.1	-162.02	-182.6	187.3	726.9	702.2	24.69	29.438		
5,800.0	5,715.8	5,713.5	5,712.8	17.0	12.3	-162.74	-182.6	187.3	756.7	731.5	25.17	30.065		
5,900.0	5,810.9	5,808.5	5,807.9	17.6	12.5	-163.41	-182.6	187.3	786.6	760.9	25.65	30.670		
6,000.0	5,905.9	5,903.5	5,902.9	18.2	12.8	-164.03	-182.6	187.3	816.5	790.4	26.13	31.254		
6,100.0	6,001.0	5,998.6	5,998.0	18.8	13.0	-164.61	-182.6	187.3	846.6	820.0	26.61	31.818		
6,200.0	6,096.0	6,093.6	6,093.0	19.4	13.2	-165.15	-182.6	187.3	876.7	849.6	27.09	32.363		
6,300.0	6,191.0	6,188.7	6,188.0	20.0	13.4	-165.65	-182.6	187.3	906.9	879.3	27.57	32.890		
6,400.0	6,286.1	6,283.7	6,283.1	20.6	13.6	-166.12	-182.6	187.3	937.1	909.1	28.06	33.398		
6,500.0	6,381.1	6,378.8	6,378.1	21.2	13.8	-166.56	-182.6	187.3	967.4	938.9	28.55	33.890		
6,541.3	6,420.4	6,418.0	6,417.4	21.5	13.9	-166.74	-182.6	187.3	980.0	951.2	28.75	34.088		
6,550.0	6,428.7	6,426.3	6,425.7	21.5	13.9	-169.57	-182.6	187.3	982.6	953.8	28.78	34.144		
6,600.0	6,476.4	6,470.2	6,469.5	21.8	14.0	173.10	-182.9	187.4	997.5	968.5	28.95	34.450		
6,650.0	6,524.2	6,509.1	6,508.4	22.0	14.1	155.90	-185.4	187.6	1,012.1	982.9	29.14	34.731		
6,700.0	6,571.6	6,550.0	6,548.9	22.2	14.2	141.17	-191.0	188.1	1,026.5	997.1	29.34	34.985		
6,750.0	6,618.4	6,580.1	6,578.4	22.4	14.2	129.51	-196.9	188.6	1,040.8	1,011.3	29.52	35.256		
6,800.0	6,664.1	6,610.4	6,607.8	22.6	14.3	120.79	-204.3	189.2	1,055.2	1,025.5	29.70	35.526		
6,850.0	6,708.4	6,636.7	6,632.8	22.7	14.3	114.16	-212.1	189.9	1,070.0	1,040.1	29.88	35.814		
6,900.0	6,751.0	6,658.8	6,653.7	22.9	14.4	108.96	-219.4	190.6	1,085.2	1,055.2	30.04	36.124		
6,950.0	6,791.5	6,676.8	6,670.4	23.0	14.4	104.68	-226.1	191.1	1,101.0	1,070.8	30.20	36.457		
7,000.0	6,829.7	6,700.0	6,691.7	23.1	14.5	101.42	-235.3	192.0	1,117.6	1,087.2	30.38	36.791		
7,050.0	6,865.2	6,700.0	6,691.7	23.2	14.5	97.55	-235.3	192.0	1,134.8	1,104.3	30.51	37.195		
7,100.0	6,897.8	6,700.0	6,691.7	23.3	14.5	94.04	-235.3	192.0	1,152.8	1,122.1	30.64	37.620		
7,150.0	6,927.2	6,714.1	6,704.4	23.4	14.5	91.56	-241.4	192.5	1,171.2	1,140.4	30.81	38.015		
7,189.8	6,948.2	6,716.2	6,706.2	23.4	14.5	89.28	-242.3	192.6	1,186.3	1,155.4	30.91	38.380		
7,200.0	6,953.3	6,716.5	6,706.5	23.4	14.5	89.30	-242.5	192.6	1,190.3	1,159.3	30.95	38.453		
7,300.0	7,003.3	6,719.4	6,709.2	23.6	14.5	89.45	-243.8	192.7	1,232.7	1,201.3	31.45	39.192		
7,339.8	7,023.2	6,720.5	6,710.1	23.7	14.5	89.51	-244.2	192.7	1,251.4	1,219.7	31.69	39.487		
7,350.0	7,028.3	6,720.7	6,710.3	23.7	14.5	88.93	-244.3	192.7	1,256.4	1,224.6	31.75	39.570		
7,400.0	7,050.6	6,720.6	6,710.2	23.9	14.5	85.95	-244.3	192.7	1,281.4	1,249.4	32.03	40.009		
7,450.0	7,068.9	6,718.7	6,708.5	24.1	14.5	82.75	-243.4	192.7	1,307.4	1,275.2	32.25	40.537		
7,500.0	7,083.0	6,715.1	6,705.3	24.3	14.5	79.41	-241.8	192.5	1,334.2	1,301.8	32.39	41.192		
7,550.0	7,093.0	6,700.0	6,691.7	24.6	14.5	75.50	-235.3	192.0	1,361.6	1,329.2	32.34	42.102		
7,600.0	7,098.7	6,700.0	6,691.7	24.8	14.5	72.36	-235.3	192.0	1,389.0	1,356.7	32.27	43.044		
7,640.0	7,100.0	6,700.0	6,691.7	25.1	14.5	69.91	-235.3	192.0	1,410.9	1,378.8	32.14	43.900		
7,700.0	7,100.0	6,700.0	6,691.7	25.5	14.5	69.91	-235.3	192.0	1,444.7	1,412.0	32.73	44.134		
7,800.0	7,100.0	6,675.7	6,669.4	26.4	14.4	68.88	-225.6	191.1	1,504.1	1,470.5	33.60	44.762		
7,900.0	7,100.0	6,650.0	6,645.4	27.3	14.4	67.79	-216.4	190.3	1,567.5	1,533.0	34.53	45.390		
8,000.0	7,100.0	6,650.0	6,645.4	28.4	14.4	67.79	-216.4	190.3	1,634.0	1,598.2	35.79	45.658		
8,100.0	7,100.0	6,650.0	6,645.4	29.6	14.4	67.79	-216.4	190.3	1,703.8	1,666.7	37.12	45.906		
8,200.0	7,100.0	6,650.0	6,645.4	30.8	14.4	67.79	-216.4	190.3	1,776.5	1,738.0	38.50	46.141		
8,300.0	7,100.0	6,625.5	6,622.2	32.2	14.3	66.75	-208.6	189.6	1,851.1	1,811.5	39.66	46.671		
8,400.0	7,100.0	6,600.0	6,597.7	33.6	14.3	65.67	-201.6	189.0	1,928.5	1,887.7	40.83	47.233		
8,500.0	7,100.0	6,600.0	6,597.7	35.0	14.3	65.67	-201.6	189.0	2,007.3	1,964.9	42.32	47.426		
8,600.0	7,100.0	6,600.0	6,597.7	36.5	14.3	65.67	-201.6	189.0	2,087.9	2,044.0	43.85	47.613		
8,700.0	7,100.0	6,600.0	6,597.7	38.1	14.3	65.67	-201.6	189.0	2,170.1	2,124.7	45.40	47.796		
8,800.0	7,100.0	6,600.0	6,597.7	39.7	14.3	65.67	-201.6	189.0	2,253.7	2,206.7	46.98	47.974		
8,900.0	7,100.0	6,600.0	6,597.7	41.3	14.3	65.67	-201.6	189.0	2,338.6	2,290.1	48.57	48.148		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 2-17H20 - Wellbore #1 - Design #1													Offset Site Error: 0.0 usft	
Survey Program: 0-Sperry MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)			
9,000.0	7,100.0	6,600.0	6,597.7	42.9	14.3	65.67	-201.6	189.0	2,424.7	2,374.5	50.18	48.318		
9,100.0	7,100.0	6,579.0	6,577.3	44.6	14.2	64.79	-196.6	188.6	2,511.4	2,459.9	51.49	48.778		
9,200.0	7,100.0	6,574.8	6,573.3	46.3	14.2	64.61	-195.7	188.5	2,599.2	2,546.1	53.05	48.996		
9,300.0	7,100.0	6,571.0	6,569.5	48.0	14.2	64.45	-194.9	188.4	2,687.9	2,633.2	54.62	49.207		
9,400.0	7,100.0	6,550.0	6,548.9	49.7	14.2	63.58	-191.0	188.1	2,777.6	2,721.7	55.91	49.679		
9,500.0	7,100.0	6,550.0	6,548.9	51.4	14.2	63.58	-191.0	188.1	2,867.5	2,810.0	57.56	49.822		
9,600.0	7,100.0	6,550.0	6,548.9	53.2	14.2	63.58	-191.0	188.1	2,958.1	2,898.9	59.21	49.961		
9,700.0	7,100.0	6,550.0	6,548.9	54.9	14.2	63.58	-191.0	188.1	3,049.3	2,988.5	60.87	50.097		
9,800.0	7,100.0	6,550.0	6,548.9	56.7	14.2	63.58	-191.0	188.1	3,141.1	3,078.5	62.54	50.228		
9,900.0	7,100.0	6,550.0	6,548.9	58.5	14.2	63.58	-191.0	188.1	3,233.3	3,169.1	64.21	50.356		
10,000.0	7,100.0	6,550.0	6,548.9	60.2	14.2	63.58	-191.0	188.1	3,326.0	3,260.1	65.89	50.480		
10,100.0	7,100.0	6,550.0	6,548.9	62.0	14.2	63.58	-191.0	188.1	3,419.1	3,351.5	67.57	50.600		
10,200.0	7,100.0	6,550.0	6,548.9	63.8	14.2	63.58	-191.0	188.1	3,512.5	3,443.3	69.26	50.717		
10,300.0	7,100.0	6,550.0	6,548.9	65.7	14.2	63.58	-191.0	188.1	3,606.4	3,535.4	70.95	50.831		
10,400.0	7,100.0	6,550.0	6,548.9	67.5	14.2	63.58	-191.0	188.1	3,700.5	3,627.9	72.64	50.941		
10,500.0	7,100.0	6,550.0	6,548.9	69.3	14.2	63.58	-191.0	188.1	3,794.9	3,720.6	74.34	51.047		
10,600.0	7,100.0	6,550.0	6,548.9	71.1	14.2	63.58	-191.0	188.1	3,889.7	3,813.6	76.04	51.151		
10,700.0	7,100.0	6,550.0	6,548.9	73.0	14.2	63.58	-191.0	188.1	3,984.6	3,906.9	77.75	51.251		
10,800.0	7,100.0	6,550.0	6,548.9	74.8	14.2	63.58	-191.0	188.1	4,079.9	4,000.4	79.45	51.349		
10,900.0	7,100.0	6,550.0	6,548.9	76.6	14.2	63.58	-191.0	188.1	4,175.3	4,094.1	81.16	51.444		
11,000.0	7,100.0	6,550.0	6,548.9	78.5	14.2	63.58	-191.0	188.1	4,270.9	4,188.1	82.87	51.536		
11,100.0	7,100.0	6,527.6	6,526.7	80.3	14.1	62.66	-187.6	187.8	4,366.3	4,282.3	84.00	51.979		
11,200.0	7,100.0	6,526.1	6,525.3	82.2	14.1	62.60	-187.4	187.8	4,462.3	4,376.6	85.66	52.090		
11,300.0	7,100.0	6,524.6	6,523.8	84.0	14.1	62.54	-187.2	187.7	4,558.4	4,471.1	87.33	52.197		
11,400.0	7,100.0	6,523.2	6,522.4	85.9	14.1	62.48	-187.0	187.7	4,654.7	4,565.7	89.00	52.302		
11,500.0	7,100.0	6,500.0	6,499.3	87.7	14.1	61.54	-184.6	187.5	4,751.6	4,661.5	90.04	52.773		
11,600.0	7,100.0	6,500.0	6,499.3	89.6	14.1	61.54	-184.6	187.5	4,848.1	4,756.4	91.73	52.850		
11,700.0	7,100.0	6,500.0	6,499.3	91.5	14.1	61.54	-184.6	187.5	4,944.8	4,851.3	93.43	52.925		
11,800.0	7,100.0	6,500.0	6,499.3	93.3	14.1	61.54	-184.6	187.5	5,041.6	4,946.4	95.13	52.998		
11,900.0	7,100.0	6,500.0	6,499.3	95.2	14.1	61.54	-184.6	187.5	5,138.5	5,041.7	96.83	53.069		
12,000.0	7,100.0	6,500.0	6,499.3	97.1	14.1	61.54	-184.6	187.5	5,235.5	5,137.0	98.53	53.138		
12,100.0	7,100.0	6,500.0	6,499.3	99.0	14.1	61.54	-184.6	187.5	5,332.7	5,232.4	100.23	53.205		
12,117.8	7,100.0	6,500.0	6,499.3	99.3	14.1	61.54	-184.6	187.5	5,350.0	5,249.5	100.47	53.249		

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 3-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	126.40	-152.8	207.3	257.6					
100.0	100.0	97.0	97.0	0.1	0.1	126.40	-152.8	207.3	257.6	257.4	0.18	1,410.581		
200.0	200.0	197.0	197.0	0.3	0.3	126.40	-152.8	207.3	257.6	256.9	0.63	410.003		
300.0	300.0	297.0	297.0	0.5	0.5	126.40	-152.8	207.3	257.6	256.5	1.08	238.990		
400.0	400.0	397.0	397.0	0.8	0.8	126.40	-152.8	207.3	257.6	256.0	1.53	168.647		
500.0	500.0	497.0	497.0	1.0	1.0	126.40	-152.8	207.3	257.6	255.6	1.98	130.296 CC, ES		
600.0	600.0	589.1	589.1	1.2	1.2	126.35	-153.5	208.6	259.1	256.7	2.39	108.290		
700.0	700.0	687.3	687.2	1.4	1.4	126.21	-155.1	211.8	262.7	259.9	2.81	93.368		
800.0	800.0	787.2	787.1	1.7	1.6	126.07	-156.8	215.2	266.4	263.2	3.25	82.098		
900.0	900.0	887.2	886.9	1.9	1.8	125.94	-158.5	218.6	270.2	266.5	3.68	73.329		
1,000.0	1,000.0	987.1	986.8	2.1	2.0	125.81	-160.2	221.9	273.9	269.8	4.13	66.349		
1,100.0	1,100.0	1,087.0	1,086.7	2.3	2.2	125.69	-161.8	225.3	277.6	273.0	4.58	60.679		
1,200.0	1,200.0	1,197.1	1,196.7	2.6	2.5	125.62	-162.8	227.3	279.6	274.6	5.02	55.707		
1,300.0	1,300.0	1,297.4	1,297.0	2.8	2.7	125.62	-162.8	227.3	279.6	274.2	5.45	51.321		
1,400.0	1,400.0	1,397.4	1,397.0	3.0	2.9	125.62	-162.8	227.3	279.6	273.7	5.88	47.518		
1,500.0	1,500.0	1,497.4	1,497.0	3.2	3.1	125.62	-162.8	227.3	279.6	273.3	6.32	44.225		
1,600.0	1,600.0	1,597.4	1,597.0	3.5	3.3	125.62	-162.8	227.3	279.6	272.9	6.76	41.350		
1,700.0	1,700.0	1,697.4	1,697.0	3.7	3.5	125.62	-162.8	227.3	279.6	272.4	7.20	38.819		
1,800.0	1,800.0	1,797.4	1,797.0	3.9	3.7	125.62	-162.8	227.3	279.6	272.0	7.65	36.575		
1,900.0	1,900.0	1,897.4	1,897.0	4.1	4.0	125.62	-162.8	227.3	279.6	271.5	8.09	34.573		
2,000.0	2,000.0	1,997.4	1,997.0	4.4	4.2	125.62	-162.8	227.3	279.6	271.1	8.53	32.776		
2,100.0	2,100.0	2,097.4	2,097.0	4.6	4.4	125.62	-162.8	227.3	279.6	270.7	8.98	31.154		
2,200.0	2,200.0	2,197.4	2,197.0	4.8	4.6	125.62	-162.8	227.3	279.6	270.2	9.42	29.684		
2,300.0	2,300.0	2,297.4	2,297.0	5.0	4.8	125.62	-162.8	227.3	279.6	269.8	9.87	28.345		
2,400.0	2,400.0	2,397.4	2,397.0	5.3	5.1	125.62	-162.8	227.3	279.6	269.3	10.31	27.120		
2,500.0	2,500.0	2,497.4	2,497.0	5.5	5.3	125.62	-162.8	227.3	279.6	268.9	10.76	25.996		
2,600.0	2,600.0	2,597.4	2,597.0	5.7	5.5	125.62	-162.8	227.3	279.6	268.4	11.20	24.961		
2,700.0	2,700.0	2,697.4	2,697.0	5.9	5.7	125.62	-162.8	227.3	279.6	268.0	11.65	24.005		
2,800.0	2,800.0	2,797.4	2,797.0	6.2	5.9	125.62	-162.8	227.3	279.6	267.5	12.10	23.118		
2,900.0	2,900.0	2,897.4	2,897.0	6.4	6.2	125.62	-162.8	227.3	279.6	267.1	12.54	22.295		
3,000.0	3,000.0	2,997.4	2,997.0	6.6	6.4	125.62	-162.8	227.3	279.6	266.6	12.99	21.527		
3,100.0	3,100.0	3,097.4	3,097.0	6.8	6.6	125.62	-162.8	227.3	279.6	266.2	13.44	20.811		
3,200.0	3,200.0	3,197.4	3,197.0	7.1	6.8	125.62	-162.8	227.3	279.6	265.7	13.88	20.141		
3,300.0	3,300.0	3,297.4	3,297.0	7.3	7.1	125.62	-162.8	227.3	279.6	265.3	14.33	19.512		
3,400.0	3,400.0	3,397.4	3,397.0	7.5	7.3	125.62	-162.8	227.3	279.6	264.9	14.78	18.921		
3,500.0	3,500.0	3,497.4	3,497.0	7.7	7.5	125.62	-162.8	227.3	279.6	264.4	15.23	18.364		
3,600.0	3,600.0	3,597.4	3,597.0	7.9	7.7	-133.90	-162.8	227.3	280.8	265.2	15.64	17.955		
3,700.0	3,699.8	3,697.2	3,696.8	8.1	7.9	-134.61	-162.8	227.3	284.5	268.4	16.05	17.729		
3,800.0	3,799.5	3,796.8	3,796.5	8.3	8.2	-135.74	-162.8	227.3	290.7	274.2	16.45	17.673 SF		
3,900.0	3,898.7	3,896.1	3,895.7	8.6	8.4	-137.24	-162.8	227.3	299.6	282.7	16.84	17.784		
4,000.0	3,997.5	3,994.9	3,994.5	8.8	8.6	-139.03	-162.8	227.3	311.3	294.0	17.24	18.060		
4,100.0	4,095.6	4,093.0	4,092.6	9.0	8.8	-141.03	-162.8	227.3	326.0	308.4	17.62	18.502		
4,200.0	4,193.1	4,190.5	4,190.1	9.3	9.0	-143.15	-162.8	227.3	343.9	325.9	18.00	19.110		
4,300.0	4,289.6	4,287.0	4,286.6	9.6	9.3	-145.31	-162.8	227.3	365.2	346.8	18.37	19.883		
4,406.0	4,391.0	4,377.9	4,377.5	10.0	9.5	-147.34	-163.0	228.4	392.6	373.9	18.72	20.971		
4,500.0	4,480.3	4,455.2	4,454.8	10.3	9.6	-149.30	-163.5	231.5	421.5	402.4	19.10	22.069		
4,600.0	4,575.4	4,535.9	4,535.2	10.7	9.8	-151.14	-164.4	236.9	455.3	435.8	19.50	23.348		
4,700.0	4,670.4	4,614.7	4,613.7	11.2	10.0	-152.75	-165.5	244.4	492.2	472.3	19.91	24.727		
4,800.0	4,765.4	4,691.7	4,690.1	11.6	10.1	-154.16	-167.0	253.7	532.0	511.7	20.31	26.191		
4,900.0	4,860.5	4,766.8	4,764.4	12.1	10.3	-155.38	-168.8	264.8	574.5	553.8	20.72	27.727		
5,000.0	4,955.5	4,840.0	4,836.4	12.6	10.5	-156.45	-170.8	277.4	619.5	598.4	21.13	29.325		
5,100.0	5,050.6	4,911.3	4,906.3	13.1	10.7	-157.37	-173.0	291.5	667.0	645.5	21.54	30.973		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 3-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,145.6	4,980.7	4,973.9	13.7	10.9	-158.16	-175.5	306.8	716.8	694.9	21.95	32.665		
5,300.0	5,240.6	5,048.1	5,039.2	14.2	11.1	-158.86	-178.1	323.2	768.8	746.5	22.35	34.392		
5,400.0	5,335.7	5,113.5	5,102.3	14.7	11.3	-159.46	-180.8	340.6	822.9	800.1	22.76	36.148		
5,500.0	5,430.7	5,177.1	5,163.1	15.3	11.5	-159.98	-183.7	358.9	878.9	855.7	23.17	37.926		
5,600.0	5,525.8	5,242.9	5,225.6	15.9	11.8	-160.47	-186.9	379.1	936.7	913.1	23.59	39.704		
5,700.0	5,620.8	5,323.7	5,302.2	16.4	12.1	-161.00	-191.0	404.5	995.2	971.1	24.03	41.406		
5,800.0	5,715.8	5,404.5	5,378.8	17.0	12.4	-161.47	-195.0	429.9	1,053.6	1,029.2	24.48	43.041		
5,900.0	5,810.9	5,485.3	5,455.5	17.6	12.8	-161.89	-199.0	455.2	1,112.2	1,087.2	24.93	44.609		
6,000.0	5,905.9	5,566.1	5,532.1	18.2	13.1	-162.27	-203.0	480.6	1,170.8	1,145.4	25.39	46.114		
6,100.0	6,001.0	5,647.0	5,608.7	18.8	13.5	-162.62	-207.1	505.9	1,229.4	1,203.5	25.85	47.558		
6,200.0	6,096.0	5,727.8	5,685.3	19.4	13.9	-162.93	-211.1	531.3	1,288.0	1,261.7	26.31	48.945		
6,300.0	6,191.0	5,808.6	5,762.0	20.0	14.3	-163.22	-215.1	556.6	1,346.6	1,319.9	26.78	50.277		
6,400.0	6,286.1	5,889.4	5,838.6	20.6	14.7	-163.48	-219.1	582.0	1,405.3	1,378.1	27.26	51.554		
6,500.0	6,381.1	5,970.2	5,915.2	21.2	15.1	-163.72	-223.2	607.4	1,464.0	1,436.3	27.74	52.781		
6,541.3	6,420.4	6,003.6	5,946.9	21.5	15.3	-163.81	-224.8	617.8	1,488.3	1,460.3	27.94	53.275		
6,550.0	6,428.7	6,010.6	5,953.5	21.5	15.3	-166.99	-225.2	620.0	1,493.3	1,465.4	27.94	53.457		
6,600.0	6,476.4	6,051.2	5,992.1	21.8	15.5	173.70	-227.2	632.8	1,522.5	1,494.5	28.00	54.375		
6,650.0	6,524.2	6,091.9	6,030.6	22.0	15.8	154.44	-229.2	645.5	1,551.1	1,523.0	28.17	55.060		
6,700.0	6,571.6	6,132.3	6,068.9	22.2	16.0	137.57	-231.2	658.2	1,579.1	1,550.7	28.43	55.542		
6,750.0	6,618.4	6,172.2	6,106.7	22.4	16.2	124.02	-233.2	670.7	1,606.3	1,577.6	28.75	55.880		
6,800.0	6,664.1	6,211.2	6,143.7	22.6	16.4	113.53	-235.2	683.0	1,632.6	1,603.5	29.08	56.133		
6,850.0	6,708.4	6,249.0	6,179.6	22.7	16.6	105.42	-237.1	694.8	1,657.9	1,628.5	29.42	56.355		
6,900.0	6,751.0	6,285.4	6,214.1	22.9	16.8	99.08	-238.9	706.3	1,682.1	1,652.4	29.73	56.588		
6,950.0	6,791.5	6,320.1	6,247.0	23.0	17.0	94.03	-240.6	717.1	1,705.3	1,675.3	29.99	56.857		
7,000.0	6,829.7	6,352.8	6,278.0	23.1	17.2	89.95	-242.2	727.4	1,727.3	1,697.1	30.21	57.176		
7,050.0	6,865.2	6,383.2	6,306.8	23.2	17.4	86.60	-243.7	737.0	1,748.2	1,717.9	30.38	57.550		
7,100.0	6,897.8	6,411.2	6,333.3	23.3	17.5	83.80	-245.1	745.7	1,768.1	1,737.6	30.50	57.975		
7,150.0	6,927.2	6,436.5	6,357.3	23.4	17.7	81.45	-246.4	753.7	1,786.8	1,756.2	30.57	58.444		
7,189.8	6,948.2	6,454.6	6,374.5	23.4	17.8	79.82	-247.3	759.3	1,800.9	1,770.3	30.61	58.841		
7,200.0	6,953.3	6,459.0	6,378.7	23.4	17.8	79.95	-247.5	760.7	1,804.5	1,773.8	30.67	58.833		
7,300.0	7,003.3	6,502.1	6,419.5	23.6	18.0	81.24	-249.7	774.2	1,841.4	1,810.1	31.36	58.715		
7,339.8	7,023.2	6,519.2	6,435.8	23.7	18.1	81.75	-250.5	779.6	1,857.1	1,825.5	31.67	58.641		
7,350.0	7,028.3	6,523.5	6,439.9	23.7	18.2	81.42	-250.7	781.0	1,861.3	1,829.5	31.73	58.662		
7,400.0	7,050.6	6,542.5	6,457.8	23.9	18.3	79.74	-251.7	786.9	1,881.4	1,849.4	32.00	58.803		
7,450.0	7,068.9	6,557.6	6,472.2	24.1	18.4	77.97	-252.4	791.7	1,901.7	1,869.5	32.22	59.021		
7,500.0	7,083.0	6,566.1	6,480.2	24.3	18.4	76.04	-252.8	794.3	1,922.0	1,889.7	32.38	59.367		
7,550.0	7,093.0	6,566.1	6,480.2	24.6	18.4	73.88	-252.8	794.3	1,942.3	1,909.9	32.43	59.891		
7,600.0	7,098.7	6,573.5	6,487.3	24.8	18.4	72.03	-253.3	796.7	1,962.4	1,929.9	32.47	60.433		
7,640.0	7,100.0	6,566.1	6,480.2	25.1	18.4	70.17	-252.8	794.3	1,978.3	1,945.9	32.38	61.091		
7,700.0	7,100.0	6,566.1	6,480.2	25.5	18.4	70.17	-252.8	794.3	2,002.7	1,969.7	32.98	60.727		
7,800.0	7,100.0	6,566.1	6,480.2	26.4	18.4	70.17	-252.8	794.3	2,046.6	2,012.5	34.07	60.079		
7,900.0	7,100.0	6,566.1	6,480.2	27.3	18.4	70.17	-252.8	794.3	2,094.4	2,059.1	35.25	59.407		
8,000.0	7,100.0	6,563.1	6,477.4	28.4	18.4	70.08	-252.7	793.4	2,145.7	2,109.2	36.51	58.777		
8,100.0	7,100.0	6,558.8	6,473.3	29.6	18.4	69.94	-252.5	792.0	2,200.4	2,162.6	37.82	58.186		
8,200.0	7,100.0	6,554.4	6,469.2	30.8	18.3	69.81	-252.3	790.7	2,258.2	2,219.0	39.19	57.627		
8,300.0	7,100.0	6,550.1	6,465.0	32.2	18.3	69.67	-252.0	789.3	2,318.9	2,278.3	40.60	57.109		
8,400.0	7,100.0	6,545.7	6,460.9	33.6	18.3	69.53	-251.8	787.9	2,382.2	2,340.1	42.06	56.635		
8,500.0	7,100.0	6,541.4	6,456.8	35.0	18.3	69.40	-251.6	786.6	2,448.0	2,404.4	43.55	56.204		
8,600.0	7,100.0	6,537.1	6,452.7	36.5	18.2	69.26	-251.4	785.2	2,516.0	2,470.9	45.08	55.817		
8,700.0	7,100.0	6,532.7	6,448.6	38.1	18.2	69.12	-251.2	783.9	2,586.0	2,539.4	46.62	55.471		
8,800.0	7,100.0	6,528.4	6,444.5	39.7	18.2	68.99	-251.0	782.5	2,658.0	2,609.8	48.18	55.164		
8,900.0	7,100.0	6,524.0	6,440.3	41.3	18.2	68.85	-250.7	781.1	2,731.8	2,682.0	49.77	54.893		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 3-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,000.0	7,100.0	6,519.7	6,436.2	42.9	18.1	68.71	-250.5	779.8	2,807.1	2,755.8	51.36	54.655		
9,100.0	7,100.0	6,515.3	6,432.1	44.6	18.1	68.58	-250.3	778.4	2,884.0	2,831.0	52.97	54.447		
9,200.0	7,100.0	6,511.0	6,428.0	46.3	18.1	68.44	-250.1	777.0	2,962.2	2,907.6	54.59	54.266		
9,300.0	7,100.0	6,506.7	6,423.9	48.0	18.1	68.30	-249.9	775.7	3,041.7	2,985.5	56.21	54.110		
9,400.0	7,100.0	6,502.3	6,419.8	49.7	18.0	68.17	-249.7	774.3	3,122.4	3,064.5	57.85	53.976		
9,500.0	7,100.0	6,498.0	6,415.6	51.4	18.0	68.03	-249.4	773.0	3,204.1	3,144.6	59.49	53.862		
9,600.0	7,100.0	6,493.6	6,411.5	53.2	18.0	67.90	-249.2	771.6	3,286.9	3,225.7	61.13	53.767		
9,700.0	7,100.0	6,489.3	6,407.4	54.9	18.0	67.76	-249.0	770.2	3,370.6	3,307.8	62.78	53.687		
9,800.0	7,100.0	6,484.9	6,403.3	56.7	17.9	67.62	-248.8	768.9	3,455.1	3,390.7	64.43	53.622		
9,900.0	7,100.0	6,480.6	6,399.2	58.5	17.9	67.49	-248.6	767.5	3,540.5	3,474.4	66.09	53.570		
10,000.0	7,100.0	6,476.3	6,395.0	60.2	17.9	67.35	-248.4	766.1	3,626.6	3,558.8	67.75	53.530		
10,100.0	7,100.0	6,471.9	6,390.9	62.0	17.9	67.22	-248.2	764.8	3,713.3	3,643.9	69.41	53.500		
10,200.0	7,100.0	6,467.6	6,386.8	63.8	17.8	67.08	-247.9	763.4	3,800.8	3,729.7	71.07	53.480		
10,300.0	7,100.0	6,463.2	6,382.7	65.7	17.8	66.94	-247.7	762.1	3,888.8	3,816.1	72.73	53.468		
10,400.0	7,100.0	6,458.9	6,378.6	67.5	17.8	66.81	-247.5	760.7	3,977.4	3,903.0	74.39	53.465		
10,500.0	7,100.0	6,454.5	6,374.5	69.3	17.8	66.67	-247.3	759.3	4,066.5	3,990.5	76.06	53.468		
10,600.0	7,100.0	6,450.2	6,370.3	71.1	17.7	66.54	-247.1	758.0	4,156.1	4,078.4	77.72	53.477		
10,700.0	7,100.0	6,445.9	6,366.2	73.0	17.7	66.40	-246.9	756.6	4,246.2	4,166.8	79.38	53.492		
10,800.0	7,100.0	6,441.5	6,362.1	74.8	17.7	66.27	-246.6	755.2	4,336.7	4,255.6	81.04	53.513		
10,900.0	7,100.0	6,437.2	6,358.0	76.6	17.7	66.13	-246.4	753.9	4,427.6	4,344.9	82.70	53.538		
11,000.0	7,100.0	6,432.8	6,353.9	78.5	17.6	65.99	-246.2	752.5	4,518.9	4,434.5	84.36	53.567		
11,100.0	7,100.0	6,428.5	6,349.8	80.3	17.6	65.86	-246.0	751.2	4,610.5	4,524.5	86.02	53.600		
11,200.0	7,100.0	6,424.1	6,345.6	82.2	17.6	65.72	-245.8	749.8	4,702.5	4,614.8	87.67	53.637		
11,300.0	7,100.0	6,419.8	6,341.5	84.0	17.6	65.59	-245.6	748.4	4,794.8	4,705.5	89.33	53.676		
11,400.0	7,100.0	6,415.5	6,337.4	85.9	17.5	65.45	-245.3	747.1	4,887.4	4,796.4	90.98	53.719		
11,500.0	7,100.0	6,411.1	6,333.3	87.7	17.5	65.32	-245.1	745.7	4,980.3	4,887.6	92.63	53.764		
11,600.0	7,100.0	6,406.8	6,329.2	89.6	17.5	65.18	-244.9	744.3	5,073.4	4,979.1	94.28	53.812		
11,700.0	7,100.0	6,402.4	6,325.0	91.5	17.5	65.05	-244.7	743.0	5,166.8	5,070.9	95.93	53.862		
11,800.0	7,100.0	6,398.1	6,320.9	93.3	17.4	64.91	-244.5	741.6	5,260.4	5,162.9	97.57	53.913		
11,900.0	7,100.0	6,393.8	6,316.8	95.2	17.4	64.78	-244.3	740.3	5,354.3	5,255.1	99.21	53.967		
12,000.0	7,100.0	6,389.4	6,312.7	97.1	17.4	64.64	-244.0	738.9	5,448.4	5,347.5	100.85	54.022		
12,100.0	7,100.0	6,385.1	6,308.6	99.0	17.4	64.51	-243.8	737.5	5,542.6	5,440.2	102.49	54.079		
12,117.8	7,100.0	6,384.3	6,307.8	99.3	17.4	64.48	-243.8	737.3	5,559.4	5,456.7	102.72	54.122		

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 4-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	123.96	-153.1	227.4	274.1					
100.0	100.0	97.0	97.0	0.1	0.1	123.96	-153.1	227.4	274.1	273.9	0.18	1,501.144		
200.0	200.0	197.0	197.0	0.3	0.3	123.96	-153.1	227.4	274.1	273.5	0.63	436.326		
300.0	300.0	297.0	297.0	0.5	0.5	123.96	-153.1	227.4	274.1	273.0	1.08	254.334		
400.0	400.0	397.0	397.0	0.8	0.8	123.96	-153.1	227.4	274.1	272.6	1.53	179.475		
500.0	500.0	497.0	497.0	1.0	1.0	123.96	-153.1	227.4	274.1	272.1	1.98	138.662 CC, ES		
600.0	600.0	589.8	589.8	1.2	1.2	123.80	-153.1	228.8	275.4	273.0	2.40	114.769		
700.0	700.0	689.4	689.3	1.4	1.4	123.42	-153.1	232.1	278.1	275.3	2.83	98.245		
800.0	800.0	789.3	789.2	1.7	1.6	123.05	-153.1	235.4	280.9	277.6	3.27	85.955		
900.0	900.0	889.3	889.1	1.9	1.8	122.68	-153.1	238.7	283.7	280.0	3.71	76.473		
1,000.0	1,000.0	989.2	989.0	2.1	2.0	122.32	-153.1	242.0	286.5	282.3	4.15	68.960		
1,100.0	1,100.0	1,089.2	1,088.9	2.3	2.3	121.97	-153.1	245.3	289.3	284.7	4.60	62.872		
1,200.0	1,200.0	1,189.1	1,188.8	2.6	2.5	121.63	-153.1	248.6	292.1	287.0	5.05	57.844		
1,300.0	1,300.0	1,289.0	1,288.6	2.8	2.7	121.29	-153.1	251.9	294.9	289.4	5.50	53.627		
1,400.0	1,400.0	1,389.0	1,388.5	3.0	3.0	120.96	-153.1	255.2	297.8	291.8	5.95	50.041		
1,500.0	1,500.0	1,497.2	1,496.7	3.2	3.2	120.75	-153.1	257.4	299.5	293.1	6.40	46.772		
1,600.0	1,600.0	1,597.5	1,597.0	3.5	3.4	120.75	-153.1	257.4	299.5	292.6	6.83	43.857		
1,700.0	1,700.0	1,697.5	1,697.0	3.7	3.6	120.75	-153.1	257.4	299.5	292.2	7.26	41.227		
1,800.0	1,800.0	1,797.5	1,797.0	3.9	3.8	120.75	-153.1	257.4	299.5	291.8	7.70	38.886		
1,900.0	1,900.0	1,897.5	1,897.0	4.1	4.0	120.75	-153.1	257.4	299.5	291.3	8.14	36.790		
2,000.0	2,000.0	1,997.5	1,997.0	4.4	4.2	120.75	-153.1	257.4	299.5	290.9	8.58	34.904		
2,100.0	2,100.0	2,097.5	2,097.0	4.6	4.4	120.75	-153.1	257.4	299.5	290.4	9.02	33.198		
2,200.0	2,200.0	2,197.5	2,197.0	4.8	4.7	120.75	-153.1	257.4	299.5	290.0	9.46	31.649		
2,300.0	2,300.0	2,297.5	2,297.0	5.0	4.9	120.75	-153.1	257.4	299.5	289.6	9.90	30.235		
2,400.0	2,400.0	2,397.5	2,397.0	5.3	5.1	120.75	-153.1	257.4	299.5	289.1	10.35	28.941		
2,500.0	2,500.0	2,497.5	2,497.0	5.5	5.3	120.75	-153.1	257.4	299.5	288.7	10.79	27.751		
2,600.0	2,600.0	2,597.5	2,597.0	5.7	5.5	120.75	-153.1	257.4	299.5	288.2	11.23	26.655		
2,700.0	2,700.0	2,697.5	2,697.0	5.9	5.8	120.75	-153.1	257.4	299.5	287.8	11.68	25.640		
2,800.0	2,800.0	2,797.5	2,797.0	6.2	6.0	120.75	-153.1	257.4	299.5	287.3	12.12	24.700		
2,900.0	2,900.0	2,897.5	2,897.0	6.4	6.2	120.75	-153.1	257.4	299.5	286.9	12.57	23.825		
3,000.0	3,000.0	2,997.5	2,997.0	6.6	6.4	120.75	-153.1	257.4	299.5	286.4	13.01	23.010		
3,100.0	3,100.0	3,097.5	3,097.0	6.8	6.6	120.75	-153.1	257.4	299.5	286.0	13.46	22.248		
3,200.0	3,200.0	3,197.5	3,197.0	7.1	6.9	120.75	-153.1	257.4	299.5	285.6	13.91	21.534		
3,300.0	3,300.0	3,297.5	3,297.0	7.3	7.1	120.75	-153.1	257.4	299.5	285.1	14.35	20.865		
3,400.0	3,400.0	3,397.5	3,397.0	7.5	7.3	120.75	-153.1	257.4	299.5	284.7	14.80	20.235		
3,500.0	3,500.0	3,497.5	3,497.0	7.7	7.5	120.75	-153.1	257.4	299.5	284.2	15.25	19.643		
3,600.0	3,600.0	3,597.5	3,597.0	7.9	7.7	-138.73	-153.1	257.4	300.8	285.1	15.65	19.214		
3,700.0	3,699.8	3,697.3	3,696.8	8.1	8.0	-139.32	-153.1	257.4	304.7	288.7	16.06	18.978		
3,800.0	3,799.5	3,796.9	3,796.5	8.3	8.2	-140.28	-153.1	257.4	311.4	294.9	16.45	18.926 SF		
3,900.0	3,898.7	3,896.2	3,895.7	8.6	8.4	-141.55	-153.1	257.4	320.9	304.0	16.84	19.050		
4,000.0	3,997.5	3,994.9	3,994.5	8.8	8.6	-143.07	-153.1	257.4	333.3	316.1	17.23	19.347		
4,100.0	4,095.6	4,084.2	4,083.7	9.0	8.8	-144.68	-153.0	258.6	350.0	332.4	17.58	19.907		
4,200.0	4,193.1	4,170.9	4,170.4	9.3	9.0	-146.51	-152.6	262.4	372.6	354.7	17.92	20.789		
4,300.0	4,289.6	4,255.2	4,254.3	9.6	9.2	-148.44	-151.9	268.6	401.1	382.9	18.25	21.979		
4,406.0	4,391.0	4,341.2	4,339.9	10.0	9.4	-150.44	-151.0	277.5	438.0	419.4	18.59	23.563		
4,500.0	4,480.3	4,415.0	4,413.1	10.3	9.6	-152.43	-149.9	287.2	474.9	456.0	18.96	25.054		
4,600.0	4,575.4	4,491.5	4,488.6	10.7	9.8	-154.31	-148.7	299.2	517.1	497.7	19.35	26.724		
4,700.0	4,670.4	4,565.8	4,561.7	11.2	10.0	-155.97	-147.2	312.7	562.0	542.3	19.74	28.467		
4,800.0	4,765.4	4,638.1	4,632.4	11.6	10.2	-157.44	-145.6	327.7	609.6	589.5	20.14	30.269		
4,900.0	4,860.5	4,723.0	4,715.1	12.1	10.4	-158.98	-143.6	346.5	658.7	638.2	20.56	32.046		
5,000.0	4,955.5	4,808.8	4,798.8	12.6	10.7	-160.31	-141.6	365.5	708.2	687.2	20.98	33.763		
5,100.0	5,050.6	4,894.5	4,882.4	13.1	11.0	-161.48	-139.6	384.4	757.9	736.5	21.40	35.415		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 4-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,145.6	4,980.3	4,966.0	13.7	11.3	-162.51	-137.6	403.4	807.9	786.0	21.83	37.004		
5,300.0	5,240.6	5,066.1	5,049.6	14.2	11.5	-163.42	-135.6	422.4	858.0	835.7	22.27	38.532		
5,400.0	5,335.7	5,151.8	5,133.2	14.7	11.8	-164.23	-133.5	441.3	908.2	885.5	22.70	40.001		
5,500.0	5,430.7	5,237.6	5,216.9	15.3	12.1	-164.95	-131.5	460.3	958.6	935.4	23.15	41.412		
5,600.0	5,525.8	5,323.4	5,300.5	15.9	12.5	-165.61	-129.5	479.3	1,009.1	985.5	23.59	42.768		
5,700.0	5,620.8	5,409.1	5,384.1	16.4	12.8	-166.20	-127.5	498.2	1,059.7	1,035.6	24.04	44.070		
5,800.0	5,715.8	5,494.9	5,467.7	17.0	13.1	-166.74	-125.5	517.2	1,110.3	1,085.8	24.50	45.321		
5,900.0	5,810.9	5,580.7	5,551.3	17.6	13.4	-167.23	-123.5	536.1	1,161.0	1,136.1	24.96	46.523		
6,000.0	5,905.9	5,666.4	5,635.0	18.2	13.8	-167.69	-121.4	555.1	1,211.8	1,186.4	25.42	47.678		
6,100.0	6,001.0	5,752.2	5,718.6	18.8	14.1	-168.10	-119.4	574.1	1,262.6	1,236.7	25.88	48.788		
6,200.0	6,096.0	5,838.0	5,802.2	19.4	14.4	-168.49	-117.4	593.0	1,313.5	1,287.2	26.35	49.855		
6,300.0	6,191.0	5,923.8	5,885.8	20.0	14.8	-168.84	-115.4	612.0	1,364.4	1,337.6	26.82	50.881		
6,400.0	6,286.1	6,009.5	5,969.4	20.6	15.1	-169.17	-113.4	631.0	1,415.4	1,388.1	27.29	51.868		
6,500.0	6,381.1	6,095.3	6,053.1	21.2	15.5	-169.48	-111.4	649.9	1,466.4	1,438.6	27.76	52.818		
6,541.3	6,420.4	6,130.7	6,087.6	21.5	15.6	-169.60	-110.5	657.8	1,487.4	1,459.5	27.96	53.200		
6,550.0	6,428.7	6,138.2	6,094.9	21.5	15.7	-172.66	-110.3	659.4	1,491.8	1,463.9	27.98	53.318		
6,600.0	6,476.4	6,181.4	6,137.1	21.8	15.8	168.72	-109.3	669.0	1,516.9	1,488.7	28.15	53.882		
6,650.0	6,524.2	6,225.0	6,179.5	22.0	16.0	150.18	-108.3	678.6	1,541.1	1,512.7	28.40	54.268		
6,700.0	6,571.6	6,268.5	6,222.0	22.2	16.2	134.03	-107.3	688.2	1,564.3	1,535.6	28.69	54.523		
6,750.0	6,618.4	6,311.7	6,264.1	22.4	16.4	121.21	-106.3	697.8	1,586.4	1,557.4	29.00	54.696		
6,800.0	6,664.1	6,354.2	6,305.5	22.6	16.6	111.45	-105.3	707.2	1,607.3	1,578.0	29.31	54.828		
6,850.0	6,708.4	6,395.7	6,346.0	22.7	16.7	104.06	-104.3	716.4	1,626.9	1,597.3	29.61	54.949		
6,900.0	6,751.0	6,435.9	6,385.1	22.9	16.9	98.43	-103.3	725.2	1,645.4	1,615.5	29.87	55.076		
6,950.0	6,791.5	6,450.0	6,398.9	23.0	17.0	93.55	-103.0	728.4	1,662.8	1,632.7	30.07	55.302		
7,000.0	6,829.7	6,450.0	6,398.9	23.1	17.0	89.24	-103.0	728.4	1,679.7	1,649.5	30.20	55.616		
7,050.0	6,865.2	6,470.7	6,419.0	23.2	17.1	86.13	-102.6	733.5	1,695.6	1,665.3	30.34	55.880		
7,100.0	6,897.8	6,478.6	6,426.5	23.3	17.1	83.25	-102.5	735.6	1,710.9	1,680.5	30.43	56.232		
7,150.0	6,927.2	6,500.0	6,447.0	23.4	17.2	81.21	-102.3	741.9	1,725.7	1,695.2	30.52	56.539		
7,189.8	6,948.2	6,500.0	6,447.0	23.4	17.2	79.39	-102.3	741.9	1,736.6	1,706.0	30.54	56.868		
7,200.0	6,953.3	6,500.0	6,447.0	23.4	17.2	79.39	-102.3	741.9	1,739.3	1,708.7	30.59	56.863		
7,300.0	7,003.3	6,500.0	6,447.0	23.6	17.2	79.39	-102.3	741.9	1,769.1	1,738.0	31.16	56.778		
7,339.8	7,023.2	6,500.0	6,447.0	23.7	17.2	79.39	-102.3	741.9	1,782.4	1,751.0	31.42	56.721		
7,350.0	7,028.3	6,500.0	6,447.0	23.7	17.2	79.00	-102.3	741.9	1,785.9	1,754.5	31.46	56.764		
7,400.0	7,050.6	6,500.0	6,447.0	23.9	17.2	77.10	-102.3	741.9	1,803.3	1,771.6	31.63	57.007		
7,450.0	7,068.9	6,500.0	6,447.0	24.1	17.2	75.23	-102.3	741.9	1,820.8	1,789.0	31.77	57.311		
7,500.0	7,083.0	6,522.2	6,468.0	24.3	17.4	74.11	-102.2	749.3	1,837.8	1,805.8	31.99	57.451		
7,550.0	7,093.0	6,524.5	6,470.1	24.6	17.4	72.40	-102.2	750.1	1,855.1	1,823.0	32.08	57.823		
7,600.0	7,098.7	6,525.9	6,471.4	24.8	17.4	70.72	-102.2	750.5	1,872.2	1,840.0	32.14	58.251		
7,640.0	7,100.0	6,526.2	6,471.7	25.1	17.4	69.40	-102.2	750.7	1,885.6	1,853.5	32.16	58.624		
7,700.0	7,100.0	6,526.3	6,471.8	25.5	17.4	69.41	-102.2	750.7	1,906.5	1,873.7	32.76	58.200		
7,800.0	7,100.0	6,526.5	6,472.0	26.4	17.4	69.41	-102.2	750.8	1,944.9	1,911.0	33.84	57.474		
7,900.0	7,100.0	6,526.7	6,472.2	27.3	17.4	69.42	-102.2	750.8	1,987.6	1,952.5	35.02	56.749		
8,000.0	7,100.0	6,526.9	6,472.3	28.4	17.4	69.42	-102.2	750.9	2,034.3	1,998.0	36.29	56.050		
8,100.0	7,100.0	6,527.0	6,472.5	29.6	17.4	69.43	-102.2	750.9	2,084.7	2,047.1	37.64	55.390		
8,200.0	7,100.0	6,527.2	6,472.7	30.8	17.4	69.44	-102.2	751.0	2,138.7	2,099.6	39.04	54.780		
8,300.0	7,100.0	6,527.4	6,472.8	32.2	17.4	69.44	-102.2	751.1	2,195.9	2,155.4	40.50	54.224		
8,400.0	7,100.0	6,527.5	6,473.0	33.6	17.4	69.45	-102.2	751.1	2,256.0	2,214.0	41.99	53.723		
8,500.0	7,100.0	6,527.7	6,473.1	35.0	17.4	69.45	-102.2	751.2	2,318.9	2,275.4	43.53	53.274		
8,600.0	7,100.0	6,527.9	6,473.3	36.5	17.4	69.46	-102.2	751.2	2,384.4	2,339.3	45.09	52.876		
8,700.0	7,100.0	6,528.0	6,473.4	38.1	17.4	69.46	-102.2	751.3	2,452.2	2,405.5	46.69	52.525		
8,800.0	7,100.0	6,528.2	6,473.6	39.7	17.4	69.47	-102.2	751.4	2,522.1	2,473.8	48.30	52.216		
8,900.0	7,100.0	6,528.3	6,473.7	41.3	17.4	69.47	-102.2	751.4	2,594.0	2,544.1	49.94	51.946		

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

SandRidge Energy

Anticollision Report

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Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Castle 0780 4-17H20 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,000.0	7,100.0	6,528.5	6,473.9	42.9	17.4	69.48	-102.2	751.5	2,667.7	2,616.1	51.59	51.712		
9,100.0	7,100.0	6,528.7	6,474.0	44.6	17.4	69.48	-102.2	751.5	2,743.1	2,689.8	53.26	51.508		
9,200.0	7,100.0	6,528.8	6,474.1	46.3	17.4	69.49	-102.2	751.6	2,820.0	2,765.0	54.94	51.332		
9,300.0	7,100.0	6,529.0	6,474.3	48.0	17.4	69.49	-102.2	751.6	2,898.3	2,841.7	56.63	51.181		
9,400.0	7,100.0	6,529.1	6,474.4	49.7	17.4	69.50	-102.2	751.7	2,977.9	2,919.6	58.33	51.052		
9,500.0	7,100.0	6,529.3	6,474.6	51.4	17.4	69.50	-102.2	751.7	3,058.7	2,998.7	60.04	50.943		
9,600.0	7,100.0	6,529.4	6,474.7	53.2	17.4	69.51	-102.2	751.8	3,140.6	3,078.9	61.76	50.850		
9,700.0	7,100.0	6,529.5	6,474.8	54.9	17.4	69.51	-102.2	751.8	3,223.6	3,160.1	63.49	50.773		
9,800.0	7,100.0	6,529.7	6,475.0	56.7	17.4	69.52	-102.2	751.9	3,307.5	3,242.2	65.22	50.709		
9,900.0	7,100.0	6,529.8	6,475.1	58.5	17.4	69.52	-102.2	751.9	3,392.2	3,325.3	66.96	50.657		
10,000.0	7,100.0	6,530.0	6,475.2	60.2	17.4	69.52	-102.2	752.0	3,477.8	3,409.1	68.71	50.616		
10,100.0	7,100.0	6,530.1	6,475.3	62.0	17.4	69.53	-102.2	752.0	3,564.1	3,493.6	70.46	50.584		
10,200.0	7,100.0	6,550.0	6,493.8	63.8	17.5	70.17	-102.2	759.5	3,651.4	3,578.9	72.51	50.360		
10,300.0	7,100.0	6,550.0	6,493.8	65.7	17.5	70.17	-102.2	759.5	3,739.0	3,664.8	74.27	50.345		
10,400.0	7,100.0	6,550.0	6,493.8	67.5	17.5	70.17	-102.2	759.5	3,827.3	3,751.3	76.04	50.336		
10,500.0	7,100.0	6,550.0	6,493.8	69.3	17.5	70.17	-102.2	759.5	3,916.1	3,838.3	77.81	50.332		
10,600.0	7,100.0	6,550.0	6,493.8	71.1	17.5	70.17	-102.2	759.5	4,005.5	3,925.9	79.58	50.334		
10,700.0	7,100.0	6,550.0	6,493.8	73.0	17.5	70.17	-102.2	759.5	4,095.3	4,014.0	81.35	50.339		
10,800.0	7,100.0	6,550.0	6,493.8	74.8	17.5	70.17	-102.2	759.5	4,185.6	4,102.5	83.13	50.349		
10,900.0	7,100.0	6,550.0	6,493.8	76.6	17.5	70.17	-102.2	759.5	4,276.4	4,191.4	84.91	50.361		
11,000.0	7,100.0	6,550.0	6,493.8	78.5	17.5	70.17	-102.2	759.5	4,367.5	4,280.8	86.70	50.377		
11,100.0	7,100.0	6,550.0	6,493.8	80.3	17.5	70.17	-102.2	759.5	4,459.0	4,370.5	88.48	50.394		
11,200.0	7,100.0	6,550.0	6,493.8	82.2	17.5	70.17	-102.2	759.5	4,550.9	4,460.6	90.27	50.414		
11,300.0	7,100.0	6,550.0	6,493.8	84.0	17.5	70.17	-102.2	759.5	4,643.1	4,551.1	92.06	50.436		
11,400.0	7,100.0	6,550.0	6,493.8	85.9	17.5	70.17	-102.2	759.5	4,735.6	4,641.8	93.85	50.460		
11,500.0	7,100.0	6,550.0	6,493.8	87.7	17.5	70.17	-102.2	759.5	4,828.5	4,732.8	95.64	50.485		
11,600.0	7,100.0	6,550.0	6,493.8	89.6	17.5	70.17	-102.2	759.5	4,921.6	4,824.1	97.44	50.511		
11,700.0	7,100.0	6,550.0	6,493.8	91.5	17.5	70.17	-102.2	759.5	5,015.0	4,915.7	99.23	50.538		
11,800.0	7,100.0	6,550.0	6,493.8	93.3	17.5	70.17	-102.2	759.5	5,108.6	5,007.6	101.03	50.566		
11,900.0	7,100.0	6,550.0	6,493.8	95.2	17.5	70.17	-102.2	759.5	5,202.4	5,099.6	102.83	50.595		
12,000.0	7,100.0	6,550.0	6,493.8	97.1	17.5	70.17	-102.2	759.5	5,296.5	5,191.9	104.62	50.624		
12,100.0	7,100.0	6,550.0	6,493.8	99.0	17.5	70.17	-102.2	759.5	5,390.8	5,284.4	106.42	50.654		
12,117.8	7,100.0	6,550.0	6,493.8	99.3	17.5	70.17	-102.2	759.5	5,407.6	5,301.0	106.68	50.689		

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Hebron 0780 3-18H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-179.01	-149.6	-2.6	149.6					
100.0	100.0	97.0	97.0	0.1	0.1	-179.01	-149.6	-2.6	149.6	149.4	0.18	819.294		
200.0	200.0	197.0	197.0	0.3	0.3	-179.01	-149.6	-2.6	149.6	149.0	0.63	238.138		
300.0	300.0	297.0	297.0	0.5	0.5	-179.01	-149.6	-2.6	149.6	148.5	1.08	138.810		
400.0	400.0	397.0	397.0	0.8	0.8	-179.01	-149.6	-2.6	149.6	148.1	1.53	97.954		
500.0	500.0	497.0	497.0	1.0	1.0	-179.01	-149.6	-2.6	149.6	147.6	1.98	75.679		
600.0	600.0	597.0	597.0	1.2	1.2	-179.01	-149.6	-2.6	149.6	147.2	2.43	61.658		
700.0	700.0	697.0	697.0	1.4	1.4	-179.01	-149.6	-2.6	149.6	146.7	2.88	52.020		
800.0	800.0	797.0	797.0	1.7	1.7	-179.01	-149.6	-2.6	149.6	146.3	3.33	44.988		
900.0	900.0	897.0	897.0	1.9	1.9	-179.01	-149.6	-2.6	149.6	145.8	3.77	39.631		
1,000.0	1,000.0	997.0	997.0	2.1	2.1	-179.01	-149.6	-2.6	149.6	145.4	4.22	35.413		
1,100.0	1,100.0	1,097.0	1,097.0	2.3	2.3	-179.01	-149.6	-2.6	149.6	144.9	4.67	32.007		
1,200.0	1,200.0	1,197.0	1,197.0	2.6	2.6	-179.01	-149.6	-2.6	149.6	144.5	5.12	29.199		
1,300.0	1,300.0	1,297.0	1,297.0	2.8	2.8	-179.01	-149.6	-2.6	149.6	144.0	5.57	26.844		
1,400.0	1,400.0	1,397.0	1,397.0	3.0	3.0	-179.01	-149.6	-2.6	149.6	143.6	6.02	24.840		
1,500.0	1,500.0	1,497.0	1,497.0	3.2	3.2	-179.01	-149.6	-2.6	149.6	143.1	6.47	23.115		
1,600.0	1,600.0	1,597.0	1,597.0	3.5	3.5	-179.01	-149.6	-2.6	149.6	142.7	6.92	21.614		
1,700.0	1,700.0	1,697.0	1,697.0	3.7	3.7	-179.01	-149.6	-2.6	149.6	142.2	7.37	20.296		
1,800.0	1,800.0	1,797.0	1,797.0	3.9	3.9	-179.01	-149.6	-2.6	149.6	141.8	7.82	19.129		
1,900.0	1,900.0	1,897.0	1,897.0	4.1	4.1	-179.01	-149.6	-2.6	149.6	141.3	8.27	18.089		
2,000.0	2,000.0	1,997.0	1,997.0	4.4	4.4	-179.01	-149.6	-2.6	149.6	140.9	8.72	17.157		
2,100.0	2,100.0	2,097.0	2,097.0	4.6	4.6	-179.01	-149.6	-2.6	149.6	140.4	9.17	16.316		
2,200.0	2,200.0	2,197.0	2,197.0	4.8	4.8	-179.01	-149.6	-2.6	149.6	140.0	9.62	15.553		
2,300.0	2,300.0	2,297.0	2,297.0	5.0	5.0	-179.01	-149.6	-2.6	149.6	139.5	10.07	14.859		
2,400.0	2,400.0	2,397.0	2,397.0	5.3	5.3	-179.01	-149.6	-2.6	149.6	139.1	10.52	14.224		
2,500.0	2,500.0	2,497.0	2,497.0	5.5	5.5	-179.01	-149.6	-2.6	149.6	138.6	10.97	13.641		
2,600.0	2,600.0	2,597.0	2,597.0	5.7	5.7	-179.01	-149.6	-2.6	149.6	138.2	11.42	13.104		
2,700.0	2,700.0	2,697.0	2,697.0	5.9	5.9	-179.01	-149.6	-2.6	149.6	137.7	11.87	12.607		
2,800.0	2,800.0	2,797.0	2,797.0	6.2	6.2	-179.01	-149.6	-2.6	149.6	137.3	12.32	12.147		
2,900.0	2,900.0	2,897.0	2,897.0	6.4	6.4	-179.01	-149.6	-2.6	149.6	136.8	12.77	11.719		
3,000.0	3,000.0	2,997.0	2,997.0	6.6	6.6	-179.01	-149.6	-2.6	149.6	136.4	13.22	11.321		
3,100.0	3,100.0	3,097.0	3,097.0	6.8	6.8	-179.01	-149.6	-2.6	149.6	135.9	13.66	10.948		
3,200.0	3,200.0	3,197.0	3,197.0	7.1	7.1	-179.01	-149.6	-2.6	149.6	135.5	14.11	10.599		
3,300.0	3,300.0	3,297.0	3,297.0	7.3	7.3	-179.01	-149.6	-2.6	149.6	135.0	14.56	10.272		
3,400.0	3,400.0	3,397.8	3,397.8	7.5	7.5	-178.38	-149.3	-4.2	149.3	134.3	15.00	9.953		
3,500.0	3,500.0	3,498.4	3,498.3	7.7	7.7	-176.40	-148.3	-9.3	148.6	133.2	15.43	9.630		
3,600.0	3,600.0	3,598.7	3,598.1	7.9	7.9	-73.01	-146.7	-17.9	147.3	131.4	15.86	9.288		
3,700.0	3,699.8	3,698.7	3,697.4	8.1	8.1	-70.23	-144.5	-29.8	145.0	128.7	16.27	8.911		
3,800.0	3,799.5	3,798.3	3,795.8	8.3	8.4	-67.30	-141.6	-45.1	141.8	125.1	16.70	8.492		
3,900.0	3,898.7	3,897.7	3,893.3	8.6	8.6	-64.13	-138.1	-63.6	137.8	120.7	17.15	8.035		
4,000.0	3,997.5	3,996.7	3,989.8	8.8	8.9	-60.63	-134.0	-85.4	133.1	115.4	17.62	7.550		
4,100.0	4,095.6	4,095.3	4,085.1	9.0	9.2	-56.72	-129.4	-110.4	127.7	109.6	18.12	7.047		
4,200.0	4,193.1	4,194.3	4,180.1	9.3	9.6	-52.54	-124.2	-138.0	121.6	103.0	18.64	6.528		
4,300.0	4,289.6	4,293.8	4,275.4	9.6	9.9	-49.13	-119.0	-165.9	114.1	95.0	19.17	5.955		
4,406.0	4,391.0	4,399.1	4,376.4	10.0	10.4	-46.49	-113.4	-195.5	104.1	84.3	19.75	5.268		
4,500.0	4,480.3	4,492.5	4,465.8	10.3	10.8	-44.26	-108.5	-221.8	94.1	73.8	20.34	4.628		
4,600.0	4,575.4	4,591.9	4,561.1	10.7	11.2	-41.31	-103.2	-249.7	83.7	62.8	20.94	3.999		
4,700.0	4,670.4	4,691.2	4,656.3	11.2	11.6	-37.55	-98.0	-277.6	73.6	52.1	21.49	3.426		
4,800.0	4,765.4	4,790.6	4,751.5	11.6	12.1	-32.62	-92.8	-305.5	63.9	42.0	21.95	2.913		
4,900.0	4,860.5	4,890.0	4,846.7	12.1	12.6	-26.01	-87.5	-333.4	54.9	32.6	22.25	2.467		
5,000.0	4,955.5	4,989.3	4,941.9	12.6	13.1	-16.98	-82.3	-361.3	46.8	24.5	22.35	2.095		
5,100.0	5,050.6	5,088.7	5,037.1	13.1	13.6	-4.70	-77.1	-389.2	40.4	18.1	22.32	1.810 Level 4		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Hebron 0780 3-18H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,145.6	5,188.0	5,132.3	13.7	14.1	11.13	-71.8	-417.2	36.4	13.8	22.58	1.613	Level 4	
5,268.7	5,210.9	5,256.3	5,197.8	14.0	14.4	23.40	-68.2	-436.3	35.6	12.3	23.30	1.527	Level 4, CC	
5,300.0	5,240.6	5,287.4	5,227.5	14.2	14.6	29.05	-66.6	-445.1	35.8	11.9	23.81	1.502	Level 4, ES	
5,400.0	5,335.7	5,386.7	5,322.7	14.7	15.1	45.96	-61.4	-473.0	38.6	12.6	25.97	1.485	Level 3, SF	
5,500.0	5,430.7	5,486.1	5,418.0	15.3	15.6	59.60	-56.1	-500.9	44.2	15.9	28.26	1.564	Level 4	
5,600.0	5,525.8	5,585.4	5,513.2	15.9	16.2	69.75	-50.9	-528.8	51.7	21.5	30.26	1.709	Level 4	
5,700.0	5,620.8	5,684.8	5,608.4	16.4	16.7	77.17	-45.7	-556.7	60.5	28.5	31.95	1.892	Level 4	
5,800.0	5,715.8	5,784.2	5,703.6	17.0	17.3	82.66	-40.4	-584.6	69.9	36.5	33.43	2.092		
5,900.0	5,810.9	5,883.5	5,798.8	17.6	17.8	86.81	-35.2	-612.5	79.9	45.1	34.77	2.298		
6,000.0	5,905.9	5,982.9	5,894.0	18.2	18.4	90.03	-30.0	-640.5	90.2	54.2	36.04	2.503		
6,100.0	6,001.0	6,082.2	5,989.2	18.8	18.9	92.59	-24.7	-668.4	100.7	63.4	37.27	2.703		
6,200.0	6,096.0	6,181.6	6,084.4	19.4	19.5	94.66	-19.5	-696.3	111.4	72.9	38.46	2.896		
6,300.0	6,191.0	6,280.9	6,179.6	20.0	20.0	96.36	-14.3	-724.2	122.2	82.5	39.64	3.082		
6,400.0	6,286.1	6,380.3	6,274.8	20.6	20.6	97.79	-9.0	-752.1	133.1	92.3	40.81	3.261		
6,500.0	6,381.1	6,479.6	6,370.1	21.2	21.2	99.01	-3.8	-780.0	144.0	102.1	41.97	3.431		
6,541.3	6,420.4	6,520.7	6,409.4	21.5	21.4	99.45	-1.6	-791.6	148.6	106.1	42.45	3.500		
6,550.0	6,428.7	6,529.3	6,417.7	21.5	21.4	97.02	-1.2	-794.0	149.5	106.9	42.58	3.510		
6,600.0	6,476.4	6,581.3	6,467.3	21.8	21.7	81.48	1.4	-808.9	152.0	108.8	43.14	3.523		
6,650.0	6,524.2	6,635.9	6,518.4	22.0	22.1	63.74	2.6	-828.4	148.8	105.3	43.50	3.421		
6,700.0	6,571.6	6,688.3	6,565.5	22.2	22.5	45.53	1.9	-851.2	140.3	96.8	43.54	3.222		
6,750.0	6,618.4	6,736.6	6,607.0	22.4	23.0	27.36	-0.2	-875.7	127.7	84.8	42.97	2.972		
6,800.0	6,664.1	6,779.8	6,642.4	22.6	23.4	8.63	-3.4	-900.3	113.6	72.2	41.42	2.742		
6,850.0	6,708.4	6,817.4	6,671.6	22.7	23.9	-10.68	-7.0	-923.7	102.0	63.2	38.79	2.630		
6,888.8	6,741.6	6,842.6	6,690.3	22.8	24.2	-24.97	-10.0	-940.3	98.5	62.0	36.51	2.699		
6,900.0	6,751.0	6,850.0	6,695.7	22.9	24.3	-29.12	-10.9	-945.3	98.9	63.0	35.86	2.757		
6,950.0	6,791.5	6,875.6	6,713.8	23.0	24.6	-43.22	-14.5	-963.1	108.8	74.8	33.96	3.204		
7,000.0	6,829.7	6,900.0	6,730.2	23.1	24.9	-54.23	-18.2	-980.8	131.5	98.5	32.99	3.987		
7,050.0	6,865.2	6,913.7	6,739.1	23.2	25.1	-58.08	-20.4	-991.0	163.3	130.4	32.81	4.975		
7,100.0	6,897.8	6,926.4	6,747.1	23.3	25.3	-59.36	-22.5	-1,000.6	200.8	168.0	32.80	6.122		
7,150.0	6,927.2	6,935.5	6,752.7	23.4	25.4	-57.30	-24.1	-1,007.5	241.8	209.0	32.80	7.373		
7,189.8	6,948.2	6,940.4	6,755.7	23.4	25.5	-53.63	-25.0	-1,011.4	276.0	243.4	32.67	8.450		
7,200.0	6,953.3	6,941.5	6,756.3	23.4	25.5	-54.05	-25.2	-1,012.1	285.0	252.3	32.69	8.719		
7,300.0	7,003.3	6,950.0	6,761.4	23.6	25.7	-57.45	-26.8	-1,018.8	376.0	343.0	32.95	11.410		
7,339.8	7,023.2	6,950.0	6,761.4	23.7	25.7	-57.45	-26.8	-1,018.8	413.3	380.2	33.06	12.502		
7,350.0	7,028.3	6,950.0	6,761.4	23.7	25.7	-54.99	-26.8	-1,018.8	422.9	390.0	32.94	12.840		
7,400.0	7,050.6	6,950.0	6,761.4	23.9	25.7	-44.21	-26.8	-1,018.8	470.0	438.0	31.94	14.713		
7,450.0	7,068.9	6,950.0	6,761.4	24.1	25.7	-35.64	-26.8	-1,018.8	516.6	486.1	30.50	16.936		
7,500.0	7,083.0	6,950.0	6,761.4	24.3	25.7	-29.04	-26.8	-1,018.8	562.6	533.7	28.99	19.407		
7,550.0	7,093.0	6,950.0	6,761.4	24.6	25.7	-23.99	-26.8	-1,018.8	607.9	580.2	27.70	21.942		
7,600.0	7,098.7	6,950.0	6,761.4	24.8	25.7	-20.11	-26.8	-1,018.8	652.2	625.4	26.84	24.303		
7,640.0	7,100.0	6,950.0	6,761.4	25.1	25.7	-17.63	-26.8	-1,018.8	686.9	660.4	26.53	25.894		
7,700.0	7,100.0	6,950.0	6,761.4	25.5	25.7	-17.63	-26.8	-1,018.8	739.1	712.2	26.84	27.541		
7,800.0	7,100.0	6,931.5	6,750.2	26.4	25.4	-14.91	-23.4	-1,004.4	827.9	801.2	26.70	31.009		
7,900.0	7,100.0	6,922.1	6,744.4	27.3	25.2	-13.59	-21.8	-997.3	919.0	892.1	26.91	34.153		
8,000.0	7,100.0	6,913.2	6,738.7	28.4	25.1	-12.37	-20.3	-990.6	1,011.6	984.4	27.15	37.260		
8,100.0	7,100.0	6,900.0	6,730.2	29.6	24.9	-10.62	-18.2	-980.8	1,105.3	1,078.0	27.26	40.545		
8,200.0	7,100.0	6,900.0	6,730.2	30.8	24.9	-10.62	-18.2	-980.8	1,199.9	1,172.1	27.82	43.124		
8,300.0	7,100.0	6,900.0	6,730.2	32.2	24.9	-10.62	-18.2	-980.8	1,295.3	1,266.9	28.41	45.598		
8,400.0	7,100.0	6,882.2	6,718.3	33.6	24.7	-8.40	-15.4	-967.8	1,391.1	1,362.7	28.40	48.984		
8,500.0	7,100.0	6,875.4	6,713.6	35.0	24.6	-7.59	-14.4	-963.0	1,487.5	1,458.7	28.78	51.692		
8,600.0	7,100.0	6,869.0	6,709.1	36.5	24.5	-6.85	-13.5	-958.4	1,584.2	1,555.0	29.17	54.302		
8,700.0	7,100.0	6,850.0	6,695.7	38.1	24.3	-4.77	-10.9	-945.3	1,681.4	1,652.1	29.25	57.481		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Hebron 0780 3-18H - Wellbore #1 - Design #1													Offset Site Error: 0.0 usft	
Survey Program: 0-Sperry MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,800.0	7,100.0	6,850.0	6,695.7	39.7	24.3	-4.77	-10.9	-945.3	1,778.6	1,748.8	29.85	59.588		
8,900.0	7,100.0	6,850.0	6,695.7	41.3	24.3	-4.77	-10.9	-945.3	1,876.2	1,845.7	30.46	61.602		
9,000.0	7,100.0	6,850.0	6,695.7	42.9	24.3	-4.77	-10.9	-945.3	1,974.0	1,942.9	31.07	63.525		
9,100.0	7,100.0	6,850.0	6,695.7	44.6	24.3	-4.77	-10.9	-945.3	2,072.0	2,040.3	31.70	65.363		
9,200.0	7,100.0	6,850.0	6,695.7	46.3	24.3	-4.77	-10.9	-945.3	2,170.1	2,137.8	32.33	67.119		
9,300.0	7,100.0	6,831.5	6,682.2	48.0	24.0	-2.92	-8.7	-932.9	2,268.3	2,235.8	32.50	69.784		
9,400.0	7,100.0	6,827.1	6,678.9	49.7	24.0	-2.50	-8.1	-930.0	2,366.6	2,333.6	33.04	71.620		
9,500.0	7,100.0	6,822.8	6,675.7	51.4	23.9	-2.10	-7.7	-927.2	2,465.1	2,431.5	33.60	73.372		
9,600.0	7,100.0	6,818.7	6,672.6	53.2	23.9	-1.73	-7.2	-924.5	2,563.7	2,529.5	34.16	75.042		
9,700.0	7,100.0	6,800.0	6,658.3	54.9	23.7	-0.13	-5.2	-912.7	2,662.5	2,628.0	34.51	77.146		
9,800.0	7,100.0	6,800.0	6,658.3	56.7	23.7	-0.13	-5.2	-912.7	2,761.1	2,726.0	35.16	78.522		
9,900.0	7,100.0	6,800.0	6,658.3	58.5	23.7	-0.13	-5.2	-912.7	2,859.9	2,824.1	35.82	79.841		
10,000.0	7,100.0	6,800.0	6,658.3	60.2	23.7	-0.13	-5.2	-912.7	2,958.8	2,922.3	36.48	81.105		
10,100.0	7,100.0	6,800.0	6,658.3	62.0	23.7	-0.13	-5.2	-912.7	3,057.7	3,020.6	37.15	82.318		
10,200.0	7,100.0	6,800.0	6,658.3	63.8	23.7	-0.13	-5.2	-912.7	3,156.7	3,118.9	37.81	83.482		
10,300.0	7,100.0	6,800.0	6,658.3	65.7	23.7	-0.13	-5.2	-912.7	3,255.8	3,217.3	38.48	84.600		
10,400.0	7,100.0	6,800.0	6,658.3	67.5	23.7	-0.13	-5.2	-912.7	3,354.9	3,315.7	39.16	85.674		
10,500.0	7,100.0	6,800.0	6,658.3	69.3	23.7	-0.13	-5.2	-912.7	3,454.0	3,414.2	39.84	86.707		
10,600.0	7,100.0	6,800.0	6,658.3	71.1	23.7	-0.13	-5.2	-912.7	3,553.3	3,512.7	40.52	87.701		
10,700.0	7,100.0	6,800.0	6,658.3	73.0	23.7	-0.13	-5.2	-912.7	3,652.5	3,611.3	41.20	88.658		
10,800.0	7,100.0	6,780.2	6,642.7	74.8	23.4	1.39	-3.4	-900.6	3,751.6	3,709.9	41.68	90.010		
10,900.0	7,100.0	6,777.7	6,640.7	76.6	23.4	1.58	-3.2	-899.1	3,850.9	3,808.5	42.35	90.928		
11,000.0	7,100.0	6,775.2	6,638.8	78.5	23.4	1.75	-3.0	-897.6	3,950.2	3,907.2	43.03	91.807		
11,100.0	7,100.0	6,772.9	6,636.9	80.3	23.4	1.92	-2.8	-896.2	4,049.5	4,005.8	43.71	92.650		
11,200.0	7,100.0	6,770.6	6,635.0	82.2	23.3	2.07	-2.6	-894.9	4,148.9	4,104.5	44.39	93.459		
11,300.0	7,100.0	6,750.0	6,618.2	84.0	23.1	3.40	-1.1	-883.1	4,248.5	4,203.4	45.06	94.275		
11,400.0	7,100.0	6,750.0	6,618.2	85.9	23.1	3.40	-1.1	-883.1	4,347.8	4,302.1	45.77	94.998		
11,500.0	7,100.0	6,750.0	6,618.2	87.7	23.1	3.40	-1.1	-883.1	4,447.2	4,400.8	46.47	95.696		
11,600.0	7,100.0	6,750.0	6,618.2	89.6	23.1	3.40	-1.1	-883.1	4,546.7	4,499.5	47.18	96.372		
11,700.0	7,100.0	6,750.0	6,618.2	91.5	23.1	3.40	-1.1	-883.1	4,646.1	4,598.2	47.89	97.025		
11,800.0	7,100.0	6,750.0	6,618.2	93.3	23.1	3.40	-1.1	-883.1	4,745.6	4,697.0	48.59	97.657		
11,900.0	7,100.0	6,750.0	6,618.2	95.2	23.1	3.40	-1.1	-883.1	4,845.1	4,795.8	49.30	98.269		
12,000.0	7,100.0	6,750.0	6,618.2	97.1	23.1	3.40	-1.1	-883.1	4,944.6	4,894.6	50.02	98.861		
12,100.0	7,100.0	6,750.0	6,618.2	99.0	23.1	3.40	-1.1	-883.1	5,044.1	4,993.4	50.73	99.436		
12,117.8	7,100.0	6,750.0	6,618.2	99.3	23.1	3.40	-1.1	-883.1	5,061.9	5,011.1	50.79	99.658		

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Hebron 0780 4-18H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	135.87	-152.0	147.4	211.7					
100.0	100.0	97.0	97.0	0.1	0.1	135.87	-152.0	147.4	211.7	211.5	0.18	1,159.404		
200.0	200.0	197.0	197.0	0.3	0.3	135.87	-152.0	147.4	211.7	211.1	0.63	336.995		
300.0	300.0	297.0	297.0	0.5	0.5	135.87	-152.0	147.4	211.7	210.6	1.08	196.434		
400.0	400.0	397.0	397.0	0.8	0.8	135.87	-152.0	147.4	211.7	210.2	1.53	138.617		
500.0	500.0	497.0	497.0	1.0	1.0	135.87	-152.0	147.4	211.7	209.7	1.98	107.095		
600.0	600.0	601.8	601.8	1.2	1.2	136.22	-152.0	145.6	210.5	208.1	2.43	86.783		
700.0	700.0	701.8	701.7	1.4	1.4	136.88	-152.0	142.3	208.2	205.4	2.86	72.925		
800.0	800.0	801.7	801.6	1.7	1.6	137.55	-152.0	139.0	206.0	202.7	3.29	62.592		
900.0	900.0	901.7	901.5	1.9	1.9	138.24	-152.0	135.7	203.8	200.0	3.73	54.626		
1,000.0	1,000.0	1,001.6	1,001.4	2.1	2.1	138.94	-152.0	132.4	201.6	197.4	4.17	48.316		
1,100.0	1,100.0	1,101.6	1,101.3	2.3	2.3	139.66	-152.0	129.0	199.4	194.8	4.62	43.205		
1,200.0	1,200.0	1,201.5	1,201.2	2.6	2.5	140.39	-152.0	125.7	197.3	192.2	5.06	38.987		
1,300.0	1,300.0	1,301.5	1,301.1	2.8	2.8	141.14	-152.0	122.4	195.2	189.7	5.51	35.450		
1,400.0	1,400.0	1,401.4	1,400.9	3.0	3.0	141.91	-152.0	119.1	193.1	187.2	5.95	32.445		
1,500.0	1,500.0	1,497.6	1,497.1	3.2	3.2	142.31	-152.0	117.4	192.0	185.7	6.38	30.120		
1,534.4	1,534.4	1,531.8	1,531.4	3.3	3.3	142.31	-152.0	117.4	192.0	185.5	6.52	29.443		
1,600.0	1,600.0	1,597.5	1,597.0	3.5	3.4	142.31	-152.0	117.4	192.0	185.2	6.80	28.232		
1,700.0	1,700.0	1,697.5	1,697.0	3.7	3.6	142.31	-152.0	117.4	192.0	184.8	7.24	26.529		
1,800.0	1,800.0	1,797.5	1,797.0	3.9	3.8	142.31	-152.0	117.4	192.0	184.4	7.68	25.014		
1,900.0	1,900.0	1,897.5	1,897.0	4.1	4.0	142.31	-152.0	117.4	192.0	183.9	8.12	23.660		
2,000.0	2,000.0	1,997.5	1,997.0	4.4	4.2	142.31	-152.0	117.4	192.0	183.5	8.56	22.441		
2,100.0	2,100.0	2,097.5	2,097.0	4.6	4.4	142.31	-152.0	117.4	192.0	183.0	9.00	21.340		
2,200.0	2,200.0	2,197.5	2,197.0	4.8	4.7	142.31	-152.0	117.4	192.0	182.6	9.44	20.340		
2,300.0	2,300.0	2,297.5	2,297.0	5.0	4.9	142.31	-152.0	117.4	192.0	182.1	9.88	19.429		
2,400.0	2,400.0	2,397.5	2,397.0	5.3	5.1	142.31	-152.0	117.4	192.0	181.7	10.33	18.595		
2,500.0	2,500.0	2,497.5	2,497.0	5.5	5.3	142.31	-152.0	117.4	192.0	181.3	10.77	17.828		
2,600.0	2,600.0	2,597.5	2,597.0	5.7	5.5	142.31	-152.0	117.4	192.0	180.8	11.22	17.122		
2,700.0	2,700.0	2,697.5	2,697.0	5.9	5.8	142.31	-152.0	117.4	192.0	180.4	11.66	16.468		
2,800.0	2,800.0	2,797.5	2,797.0	6.2	6.0	142.31	-152.0	117.4	192.0	179.9	12.11	15.863		
2,900.0	2,900.0	2,897.5	2,897.0	6.4	6.2	142.31	-152.0	117.4	192.0	179.5	12.55	15.300		
3,000.0	3,000.0	2,997.5	2,997.0	6.6	6.4	142.31	-152.0	117.4	192.0	179.0	13.00	14.775		
3,100.0	3,100.0	3,097.5	3,097.0	6.8	6.6	142.31	-152.0	117.4	192.0	178.6	13.44	14.285		
3,200.0	3,200.0	3,197.5	3,197.0	7.1	6.9	142.31	-152.0	117.4	192.0	178.1	13.89	13.826		
3,300.0	3,300.0	3,297.5	3,297.0	7.3	7.1	142.31	-152.0	117.4	192.0	177.7	14.34	13.395		
3,400.0	3,400.0	3,397.5	3,397.0	7.5	7.3	142.31	-152.0	117.4	192.0	177.2	14.78	12.990		
3,500.0	3,500.0	3,497.5	3,497.0	7.7	7.5	142.31	-152.0	117.4	192.0	176.8	15.23	12.609 CC, ES		
3,600.0	3,600.0	3,597.5	3,597.0	7.9	7.7	-117.41	-152.0	117.4	192.8	177.2	15.68	12.302		
3,700.0	3,699.8	3,697.3	3,696.8	8.1	8.0	-118.73	-152.0	117.4	195.3	179.2	16.09	12.141		
3,800.0	3,799.5	3,796.9	3,796.5	8.3	8.2	-120.85	-152.0	117.4	199.6	183.1	16.50	12.102		
3,900.0	3,898.7	3,896.2	3,895.7	8.6	8.4	-123.63	-152.0	117.4	206.2	189.3	16.90	12.196		
4,000.0	3,997.5	3,994.9	3,994.5	8.8	8.6	-126.92	-152.0	117.4	215.3	198.0	17.31	12.438		
4,100.0	4,095.6	4,093.1	4,092.6	9.0	8.8	-130.55	-152.0	117.4	227.4	209.7	17.71	12.839		
4,200.0	4,193.1	4,190.5	4,190.1	9.3	9.1	-134.31	-152.0	117.4	242.8	224.7	18.10	13.413		
4,300.0	4,289.6	4,287.1	4,286.6	9.6	9.3	-138.05	-152.0	117.4	261.8	243.3	18.48	14.165		
4,406.0	4,391.0	4,388.5	4,388.0	10.0	9.5	-141.84	-152.0	117.4	286.0	267.1	18.87	15.159		
4,500.0	4,480.3	4,483.6	4,483.1	10.3	9.7	-145.28	-152.0	116.8	309.4	290.2	19.27	16.055		
4,600.0	4,575.4	4,591.0	4,590.4	10.7	9.9	-148.35	-152.0	112.6	332.3	312.6	19.72	16.853		
4,700.0	4,670.4	4,700.5	4,699.6	11.2	10.2	-150.84	-152.0	104.2	352.3	332.1	20.17	17.465		
4,800.0	4,765.4	4,811.8	4,810.2	11.6	10.4	-152.88	-152.0	91.3	369.1	348.5	20.64	17.883		
4,900.0	4,860.5	4,924.7	4,921.7	12.1	10.7	-154.59	-152.0	73.9	382.6	361.5	21.12	18.111		
5,000.0	4,955.5	5,038.8	5,033.7	12.6	11.0	-156.02	-152.0	51.9	392.5	370.8	21.62	18.154		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Hebron 0780 4-18H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.0	5,050.6	5,153.9	5,145.6	13.1	11.4	-157.25	-152.0	25.2	398.6	376.5	22.12	18.018		
5,200.0	5,145.6	5,269.4	5,256.8	13.7	11.8	-158.32	-152.0	-6.1	401.0	378.4	22.64	17.712		
5,300.0	5,240.6	5,385.1	5,366.8	14.2	12.2	-159.24	-152.0	-42.0	399.5	376.3	23.17	17.246		
5,400.0	5,335.7	5,487.5	5,463.3	14.7	12.6	-160.01	-152.0	-76.2	395.5	371.8	23.67	16.709		
5,500.0	5,430.7	5,587.3	5,557.3	15.3	13.1	-160.76	-152.0	-109.7	391.5	367.4	24.17	16.197		
5,600.0	5,525.8	5,687.1	5,651.3	15.9	13.6	-161.54	-152.0	-143.1	387.6	363.0	24.68	15.707		
5,700.0	5,620.8	5,786.9	5,745.3	16.4	14.0	-162.32	-152.0	-176.6	383.8	358.6	25.18	15.240		
5,800.0	5,715.8	5,886.7	5,839.3	17.0	14.6	-163.13	-152.0	-210.0	380.0	354.4	25.69	14.794		
5,900.0	5,810.9	5,986.4	5,933.3	17.6	15.1	-163.95	-152.0	-243.5	376.4	350.2	26.19	14.369		
6,000.0	5,905.9	6,086.2	6,027.3	18.2	15.6	-164.78	-152.0	-276.9	372.8	346.1	26.70	13.962		
6,100.0	6,001.0	6,186.0	6,121.4	18.8	16.2	-165.63	-152.0	-310.3	369.2	342.0	27.20	13.574		
6,200.0	6,096.0	6,285.8	6,215.4	19.4	16.8	-166.50	-152.0	-343.8	365.8	338.1	27.71	13.202		
6,300.0	6,191.0	6,385.6	6,309.4	20.0	17.3	-167.38	-152.0	-377.2	362.4	334.2	28.21	12.847		
6,400.0	6,286.1	6,485.4	6,403.4	20.6	17.9	-168.28	-152.0	-410.7	359.2	330.4	28.72	12.507		
6,500.0	6,381.1	6,585.1	6,497.4	21.2	18.5	-169.20	-152.0	-444.1	356.0	326.8	29.22	12.182		
6,541.3	6,420.4	6,634.0	6,543.3	21.5	18.8	-169.59	-152.4	-460.7	354.5	325.1	29.45	12.037		
6,550.0	6,428.7	6,646.8	6,555.3	21.5	18.9	-172.08	-152.9	-465.3	354.0	324.5	29.52	11.992		
6,600.0	6,476.4	6,719.1	6,621.2	21.8	19.4	173.96	-160.7	-493.9	348.7	318.7	30.00	11.623		
6,650.0	6,524.2	6,785.8	6,679.2	22.0	19.9	162.18	-174.6	-523.7	340.2	309.5	30.71	11.077		
6,700.0	6,571.6	6,843.6	6,726.6	22.2	20.3	154.08	-191.7	-551.8	330.3	298.6	31.73	10.409		
6,750.0	6,618.4	6,891.2	6,763.4	22.4	20.7	149.46	-209.2	-576.5	321.5	288.5	32.95	9.757		
6,800.0	6,664.1	6,928.8	6,790.8	22.6	21.1	146.96	-225.1	-596.8	316.2	282.2	34.04	9.289		
6,821.0	6,682.9	6,941.9	6,799.9	22.7	21.2	146.20	-231.1	-603.9	315.6	281.2	34.38	9.179		
6,850.0	6,708.4	6,957.4	6,810.5	22.7	21.4	145.22	-238.5	-612.6	316.8	282.1	34.73	9.121 SF		
6,900.0	6,751.0	6,978.4	6,824.4	22.9	21.6	143.33	-248.8	-624.4	324.7	289.8	34.94	9.292		
6,950.0	6,791.5	6,992.8	6,833.6	23.0	21.7	140.80	-256.3	-632.6	340.4	305.7	34.73	9.801		
7,000.0	6,829.7	7,000.0	6,838.1	23.1	21.8	136.99	-260.1	-636.7	363.4	329.2	34.19	10.627		
7,050.0	6,865.2	7,006.6	6,842.2	23.2	21.9	132.73	-263.7	-640.5	392.5	358.9	33.64	11.667		
7,100.0	6,897.8	7,007.7	6,842.9	23.3	21.9	126.82	-264.3	-641.1	426.5	393.4	33.12	12.878		
7,150.0	6,927.2	7,000.0	6,838.1	23.4	21.8	118.39	-260.1	-636.7	464.2	431.5	32.75	14.173		
7,189.8	6,948.2	7,000.0	6,838.1	23.4	21.8	112.30	-260.1	-636.7	495.9	463.2	32.72	15.158		
7,200.0	6,953.3	7,000.0	6,838.1	23.4	21.8	112.30	-260.1	-636.7	504.3	471.6	32.74	15.404		
7,300.0	7,003.3	7,000.0	6,838.1	23.6	21.8	112.30	-260.1	-636.7	589.1	556.1	33.00	17.851		
7,339.8	7,023.2	7,000.0	6,838.1	23.7	21.8	112.30	-260.1	-636.7	624.1	591.0	33.15	18.829		
7,350.0	7,028.3	6,988.4	6,830.8	23.7	21.7	108.18	-254.0	-630.1	633.1	599.9	33.12	19.111		
7,400.0	7,050.6	6,983.5	6,827.7	23.9	21.6	96.95	-251.5	-627.3	678.1	644.8	33.32	20.351		
7,450.0	7,068.9	6,977.1	6,823.6	24.1	21.6	84.49	-248.2	-623.6	723.9	690.7	33.22	21.790		
7,500.0	7,083.0	6,969.5	6,818.6	24.3	21.5	72.19	-244.4	-619.4	769.9	737.4	32.42	23.749		
7,550.0	7,093.0	6,950.0	6,805.5	24.6	21.3	60.56	-234.9	-608.4	815.7	784.9	30.83	26.455		
7,600.0	7,098.7	6,950.0	6,805.5	24.8	21.3	52.21	-234.9	-608.4	860.7	831.4	29.28	29.398		
7,640.0	7,100.0	6,950.0	6,805.5	25.1	21.3	46.56	-234.9	-608.4	896.1	868.0	28.09	31.907		
7,700.0	7,100.0	6,930.2	6,791.7	25.5	21.1	46.22	-225.8	-597.5	949.0	920.5	28.42	33.393		
7,800.0	7,100.0	6,900.0	6,769.9	26.4	20.8	45.65	-212.8	-581.2	1,038.3	1,009.2	29.04	35.749		
7,900.0	7,100.0	6,900.0	6,769.9	27.3	20.8	45.65	-212.8	-581.2	1,128.4	1,098.5	29.93	37.696		
8,000.0	7,100.0	6,878.4	6,753.7	28.4	20.6	45.21	-204.2	-569.7	1,219.6	1,188.9	30.75	39.665		
8,100.0	7,100.0	6,850.0	6,731.7	29.6	20.4	44.61	-193.9	-555.1	1,311.9	1,280.4	31.55	41.582		
8,200.0	7,100.0	6,850.0	6,731.7	30.8	20.4	44.61	-193.9	-555.1	1,404.5	1,371.9	32.62	43.060		
8,300.0	7,100.0	6,850.0	6,731.7	32.2	20.4	44.61	-193.9	-555.1	1,498.0	1,464.3	33.73	44.413		
8,400.0	7,100.0	6,829.4	6,715.3	33.6	20.2	44.14	-187.1	-544.8	1,591.9	1,557.2	34.69	45.890		
8,500.0	7,100.0	6,819.7	6,707.4	35.0	20.1	43.92	-184.0	-540.0	1,686.4	1,650.6	35.77	47.146		
8,600.0	7,100.0	6,800.0	6,691.1	36.5	20.0	43.46	-178.3	-530.4	1,781.4	1,744.7	36.76	48.456		
8,700.0	7,100.0	6,800.0	6,691.1	38.1	20.0	43.46	-178.3	-530.4	1,876.6	1,838.7	37.98	49.412		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Hebron 0780 4-18H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,800.0	7,100.0	6,800.0	6,691.1	39.7	20.0	43.46	-178.3	-530.4	1,972.3	1,933.1	39.22	50.295		
8,900.0	7,100.0	6,800.0	6,691.1	41.3	20.0	43.46	-178.3	-530.4	2,068.4	2,027.9	40.47	51.110		
9,000.0	7,100.0	6,781.1	6,675.2	42.9	19.8	43.01	-173.4	-521.5	2,164.5	2,123.0	41.50	52.151		
9,100.0	7,100.0	6,775.0	6,670.0	44.6	19.8	42.87	-171.9	-518.6	2,261.0	2,218.3	42.70	52.952		
9,200.0	7,100.0	6,769.3	6,665.1	46.3	19.7	42.73	-170.5	-516.0	2,357.8	2,313.9	43.91	53.700		
9,300.0	7,100.0	6,750.0	6,648.4	48.0	19.6	42.26	-166.3	-507.3	2,454.9	2,409.9	44.93	54.642		
9,400.0	7,100.0	6,750.0	6,648.4	49.7	19.6	42.26	-166.3	-507.3	2,551.9	2,505.7	46.22	55.213		
9,500.0	7,100.0	6,750.0	6,648.4	51.4	19.6	42.26	-166.3	-507.3	2,649.1	2,601.6	47.52	55.747		
9,600.0	7,100.0	6,750.0	6,648.4	53.2	19.6	42.26	-166.3	-507.3	2,746.6	2,697.8	48.83	56.248		
9,700.0	7,100.0	6,750.0	6,648.4	54.9	19.6	42.26	-166.3	-507.3	2,844.2	2,794.1	50.15	56.719		
9,800.0	7,100.0	6,750.0	6,648.4	56.7	19.6	42.26	-166.3	-507.3	2,942.0	2,890.5	51.47	57.163		
9,900.0	7,100.0	6,750.0	6,648.4	58.5	19.6	42.26	-166.3	-507.3	3,039.9	2,987.1	52.79	57.581		
10,000.0	7,100.0	6,750.0	6,648.4	60.2	19.6	42.26	-166.3	-507.3	3,138.0	3,083.8	54.13	57.975		
10,100.0	7,100.0	6,750.0	6,648.4	62.0	19.6	42.26	-166.3	-507.3	3,236.1	3,180.7	55.46	58.348		
10,200.0	7,100.0	6,727.6	6,628.8	63.8	19.4	41.70	-162.1	-497.5	3,334.0	3,277.6	56.38	59.130		
10,300.0	7,100.0	6,724.6	6,626.1	65.7	19.4	41.63	-161.6	-496.2	3,432.2	3,374.6	57.66	59.527		
10,400.0	7,100.0	6,721.7	6,623.5	67.5	19.4	41.56	-161.1	-495.0	3,530.6	3,471.6	58.94	59.905		
10,500.0	7,100.0	6,700.0	6,604.0	69.3	19.2	41.01	-157.9	-485.9	3,629.3	3,569.5	59.83	60.660		
10,600.0	7,100.0	6,700.0	6,604.0	71.1	19.2	41.01	-157.9	-485.9	3,727.7	3,666.6	61.16	60.951		
10,700.0	7,100.0	6,700.0	6,604.0	73.0	19.2	41.01	-157.9	-485.9	3,826.2	3,763.7	62.49	61.228		
10,800.0	7,100.0	6,700.0	6,604.0	74.8	19.2	41.01	-157.9	-485.9	3,924.8	3,861.0	63.83	61.492		
10,900.0	7,100.0	6,700.0	6,604.0	76.6	19.2	41.01	-157.9	-485.9	4,023.4	3,958.3	65.16	61.744		
11,000.0	7,100.0	6,700.0	6,604.0	78.5	19.2	41.01	-157.9	-485.9	4,122.1	4,055.6	66.50	61.985		
11,100.0	7,100.0	6,700.0	6,604.0	80.3	19.2	41.01	-157.9	-485.9	4,220.9	4,153.0	67.84	62.216		
11,200.0	7,100.0	6,700.0	6,604.0	82.2	19.2	41.01	-157.9	-485.9	4,319.7	4,250.5	69.19	62.437		
11,300.0	7,100.0	6,700.0	6,604.0	84.0	19.2	41.01	-157.9	-485.9	4,418.6	4,348.1	70.53	62.649		
11,400.0	7,100.0	6,700.0	6,604.0	85.9	19.2	41.01	-157.9	-485.9	4,517.5	4,445.6	71.88	62.852		
11,500.0	7,100.0	6,700.0	6,604.0	87.7	19.2	41.01	-157.9	-485.9	4,616.5	4,543.3	73.22	63.047		
11,600.0	7,100.0	6,700.0	6,604.0	89.6	19.2	41.01	-157.9	-485.9	4,715.5	4,640.9	74.57	63.235		
11,700.0	7,100.0	6,700.0	6,604.0	91.5	19.2	41.01	-157.9	-485.9	4,814.6	4,738.6	75.92	63.415		
11,800.0	7,100.0	6,700.0	6,604.0	93.3	19.2	41.01	-157.9	-485.9	4,913.7	4,836.4	77.27	63.588		
11,900.0	7,100.0	6,700.0	6,604.0	95.2	19.2	41.01	-157.9	-485.9	5,012.8	4,934.2	78.63	63.755		
12,000.0	7,100.0	6,700.0	6,604.0	97.1	19.2	41.01	-157.9	-485.9	5,111.9	5,032.0	79.98	63.916		
12,100.0	7,100.0	6,700.0	6,604.0	99.0	19.2	41.01	-157.9	-485.9	5,211.1	5,129.8	81.33	64.072		
12,117.8	7,100.0	6,700.0	6,604.0	99.3	19.2	41.01	-157.9	-485.9	5,228.8	5,147.3	81.52	64.144		

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 2-8H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.76	-2.0	149.7	149.8					
100.0	100.0	97.0	97.0	0.1	0.1	90.76	-2.0	149.7	149.8	149.6	0.18	820.137		
200.0	200.0	197.0	197.0	0.3	0.3	90.76	-2.0	149.7	149.8	149.1	0.63	238.383		
300.0	300.0	297.0	297.0	0.5	0.5	90.76	-2.0	149.7	149.8	148.7	1.08	138.953		
400.0	400.0	397.0	397.0	0.8	0.8	90.76	-2.0	149.7	149.8	148.2	1.53	98.054		
500.0	500.0	497.0	497.0	1.0	1.0	90.76	-2.0	149.7	149.8	147.8	1.98	75.757		
600.0	600.0	597.0	597.0	1.2	1.2	90.76	-2.0	149.7	149.8	147.3	2.43	61.721		
700.0	700.0	697.0	697.0	1.4	1.4	90.76	-2.0	149.7	149.8	146.9	2.88	52.073		
800.0	800.0	797.0	797.0	1.7	1.7	90.76	-2.0	149.7	149.8	146.4	3.33	45.034		
900.0	900.0	897.0	897.0	1.9	1.9	90.76	-2.0	149.7	149.8	146.0	3.77	39.671		
1,000.0	1,000.0	997.0	997.0	2.1	2.1	90.76	-2.0	149.7	149.8	145.5	4.22	35.450		
1,100.0	1,100.0	1,097.0	1,097.0	2.3	2.3	90.76	-2.0	149.7	149.8	145.1	4.67	32.040		
1,200.0	1,200.0	1,197.0	1,197.0	2.6	2.6	90.76	-2.0	149.7	149.8	144.6	5.12	29.229		
1,300.0	1,300.0	1,297.0	1,297.0	2.8	2.8	90.76	-2.0	149.7	149.8	144.2	5.57	26.872		
1,400.0	1,400.0	1,397.0	1,397.0	3.0	3.0	90.76	-2.0	149.7	149.8	143.7	6.02	24.866		
1,500.0	1,500.0	1,497.0	1,497.0	3.2	3.2	90.76	-2.0	149.7	149.8	143.3	6.47	23.139		
1,600.0	1,600.0	1,597.0	1,597.0	3.5	3.5	90.76	-2.0	149.7	149.8	142.8	6.92	21.636		
1,700.0	1,700.0	1,697.0	1,697.0	3.7	3.7	90.76	-2.0	149.7	149.8	142.4	7.37	20.317		
1,800.0	1,800.0	1,797.0	1,797.0	3.9	3.9	90.76	-2.0	149.7	149.8	141.9	7.82	19.149		
1,900.0	1,900.0	1,897.0	1,897.0	4.1	4.1	90.76	-2.0	149.7	149.8	141.5	8.27	18.108		
2,000.0	2,000.0	1,997.0	1,997.0	4.4	4.4	90.76	-2.0	149.7	149.8	141.0	8.72	17.174		
2,100.0	2,100.0	2,097.0	2,097.0	4.6	4.6	90.76	-2.0	149.7	149.8	140.6	9.17	16.332		
2,200.0	2,200.0	2,197.0	2,197.0	4.8	4.8	90.76	-2.0	149.7	149.8	140.1	9.62	15.569		
2,300.0	2,300.0	2,297.0	2,297.0	5.0	5.0	90.76	-2.0	149.7	149.8	139.7	10.07	14.874		
2,400.0	2,400.0	2,397.0	2,397.0	5.3	5.3	90.76	-2.0	149.7	149.8	139.2	10.52	14.238		
2,500.0	2,500.0	2,497.0	2,497.0	5.5	5.5	90.76	-2.0	149.7	149.8	138.8	10.97	13.655		
2,600.0	2,600.0	2,597.0	2,597.0	5.7	5.7	90.76	-2.0	149.7	149.8	138.3	11.42	13.117		
2,700.0	2,700.0	2,697.0	2,697.0	5.9	5.9	90.76	-2.0	149.7	149.8	137.9	11.87	12.620		
2,800.0	2,800.0	2,797.0	2,797.0	6.2	6.2	90.76	-2.0	149.7	149.8	137.4	12.32	12.159		
2,900.0	2,900.0	2,897.0	2,897.0	6.4	6.4	90.76	-2.0	149.7	149.8	137.0	12.77	11.731		
3,000.0	3,000.0	2,997.0	2,997.0	6.6	6.6	90.76	-2.0	149.7	149.8	136.5	13.22	11.332		
3,100.0	3,100.0	3,097.0	3,097.0	6.8	6.8	90.76	-2.0	149.7	149.8	136.1	13.66	10.959		
3,200.0	3,200.0	3,197.0	3,197.0	7.1	7.1	90.76	-2.0	149.7	149.8	135.6	14.11	10.610		
3,300.0	3,300.0	3,297.0	3,297.0	7.3	7.3	90.76	-2.0	149.7	149.8	135.2	14.56	10.283		
3,400.0	3,400.0	3,397.0	3,397.0	7.5	7.5	90.76	-2.0	149.7	149.8	134.7	15.01	9.975		
3,500.0	3,500.0	3,497.0	3,497.0	7.7	7.7	90.76	-2.0	149.7	149.8	134.3	15.46	9.685 CC, ES		
3,600.0	3,600.0	3,597.0	3,597.0	7.9	8.0	-168.64	-2.0	149.7	151.5	135.6	15.89	9.533		
3,700.0	3,699.8	3,696.8	3,696.8	8.1	8.2	-169.00	-2.0	149.7	156.6	140.3	16.29	9.615		
3,800.0	3,799.5	3,796.5	3,796.5	8.3	8.4	-169.54	-2.0	149.7	165.2	148.5	16.67	9.906		
3,900.0	3,898.7	3,895.7	3,895.7	8.6	8.6	-170.22	-2.0	149.7	177.2	160.1	17.05	10.393		
4,000.0	3,997.5	3,994.5	3,994.5	8.8	8.8	-170.96	-2.0	149.7	192.6	175.2	17.41	11.065		
4,100.0	4,095.6	4,092.6	4,092.6	9.0	9.1	-171.72	-2.0	149.7	211.5	193.7	17.75	11.912		
4,200.0	4,193.1	4,190.1	4,190.1	9.3	9.3	-172.45	-2.0	149.7	233.8	215.7	18.09	12.924		
4,300.0	4,289.6	4,286.6	4,286.6	9.6	9.5	-173.14	-2.0	149.7	259.5	241.0	18.41	14.094		
4,406.0	4,391.0	4,388.0	4,388.0	10.0	9.7	-173.80	-2.0	149.7	290.4	271.6	18.74	15.498		
4,500.0	4,480.3	4,477.3	4,477.3	10.3	9.9	-174.37	-2.0	149.7	319.5	300.3	19.13	16.695		
4,600.0	4,575.4	4,572.4	4,572.4	10.7	10.1	-174.87	-2.0	149.7	350.4	330.9	19.56	17.912		
4,700.0	4,670.4	4,667.4	4,667.4	11.2	10.4	-175.28	-2.0	149.7	381.4	361.4	20.00	19.071		
4,800.0	4,765.4	4,762.4	4,762.4	11.6	10.6	-175.64	-2.0	149.7	412.4	392.0	20.44	20.178		
4,900.0	4,860.5	4,857.5	4,857.5	12.1	10.8	-175.94	-2.0	149.7	443.5	422.6	20.89	21.233		
5,000.0	4,955.5	4,952.5	4,952.5	12.6	11.0	-176.21	-2.0	149.7	474.5	453.2	21.34	22.241		
5,100.0	5,050.6	5,057.6	5,057.6	13.1	11.2	-176.47	-2.0	149.2	505.1	483.3	21.80	23.167		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 2-8H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,145.6	5,174.9	5,174.8	13.7	11.5	-176.79	-2.0	144.4	532.3	510.0	22.28	23.893		
5,300.0	5,240.6	5,294.7	5,294.1	14.2	11.7	-177.15	-2.0	134.6	555.5	532.8	22.76	24.411		
5,400.0	5,335.7	5,416.6	5,415.1	14.7	12.0	-177.55	-2.0	119.5	574.7	551.5	23.25	24.722		
5,500.0	5,430.7	5,527.5	5,524.6	15.3	12.2	-177.95	-2.0	101.8	590.3	566.6	23.72	24.884		
5,600.0	5,525.8	5,626.3	5,622.0	15.9	12.5	-178.29	-2.0	85.4	605.4	581.2	24.18	25.036		
5,700.0	5,620.8	5,725.0	5,719.4	16.4	12.7	-178.62	-2.0	69.0	620.5	595.8	24.64	25.178		
5,800.0	5,715.8	5,823.8	5,816.8	17.0	12.9	-178.93	-2.0	52.6	635.6	610.5	25.11	25.313		
5,900.0	5,810.9	5,922.6	5,914.3	17.6	13.2	-179.23	-2.0	36.2	650.7	625.1	25.58	25.438		
6,000.0	5,905.9	6,021.4	6,011.7	18.2	13.5	-179.51	-2.0	19.8	665.9	639.8	26.06	25.555		
6,100.0	6,001.0	6,120.2	6,109.1	18.8	13.7	-179.78	-2.0	3.4	681.0	654.5	26.54	25.665		
6,200.0	6,096.0	6,219.0	6,206.5	19.4	14.0	179.96	-2.0	-13.0	696.2	669.2	27.02	25.767		
6,300.0	6,191.0	6,317.8	6,304.0	20.0	14.3	179.71	-2.0	-29.4	711.4	683.9	27.51	25.863		
6,400.0	6,286.1	6,416.6	6,401.4	20.6	14.5	179.48	-2.0	-45.8	726.6	698.6	28.00	25.953		
6,500.0	6,381.1	6,500.0	6,483.6	21.2	14.8	179.22	-1.1	-59.5	742.3	713.8	28.46	26.080		
6,541.3	6,420.4	6,531.7	6,514.8	21.5	14.9	178.95	1.5	-64.5	749.6	720.9	28.65	26.161		
6,550.0	6,428.7	6,537.7	6,520.7	21.5	14.9	176.20	2.2	-65.4	751.2	722.5	28.71	26.163		
6,600.0	6,476.4	6,572.7	6,554.9	21.8	15.0	159.28	7.5	-70.7	760.0	730.9	29.05	26.160		
6,650.0	6,524.2	6,607.5	6,588.6	22.0	15.1	142.25	14.9	-75.6	768.1	738.7	29.38	26.141		
6,700.0	6,571.6	6,642.2	6,621.6	22.2	15.2	127.42	24.2	-80.3	775.5	745.8	29.70	26.112		
6,750.0	6,618.4	6,676.8	6,654.1	22.4	15.3	115.75	35.5	-84.6	782.1	752.1	29.99	26.076		
6,800.0	6,664.1	6,711.4	6,685.7	22.6	15.4	106.98	48.8	-88.7	787.7	757.5	30.26	26.035		
6,850.0	6,708.4	6,750.0	6,720.1	22.7	15.5	100.46	65.8	-92.8	792.5	762.0	30.51	25.978		
6,900.0	6,751.0	6,780.5	6,746.5	22.9	15.6	95.60	80.9	-95.8	796.3	765.6	30.71	25.929		
6,950.0	6,791.5	6,815.1	6,775.4	23.0	15.7	91.97	99.6	-98.8	799.2	768.3	30.91	25.856		
7,000.0	6,829.7	6,850.0	6,803.4	23.1	15.8	89.27	120.2	-101.5	801.1	770.0	31.10	25.762		
7,050.0	6,865.2	6,884.6	6,829.9	23.2	15.9	87.29	142.3	-103.8	802.0	770.7	31.28	25.637		
7,100.0	6,897.8	6,919.5	6,855.2	23.3	16.0	85.89	166.2	-105.8	801.9	770.5	31.48	25.475		
7,150.0	6,927.2	6,950.0	6,876.2	23.4	16.1	84.93	188.3	-107.2	800.9	769.3	31.67	25.290		
7,189.8	6,948.2	6,982.5	6,897.3	23.4	16.3	84.54	213.1	-108.3	799.4	767.5	31.89	25.069		
7,200.0	6,953.3	6,989.8	6,901.8	23.4	16.3	84.62	218.7	-108.5	799.0	767.0	31.97	24.988		
7,300.0	7,003.3	7,061.5	6,942.5	23.6	16.6	85.02	277.7	-109.6	796.7	763.8	32.92	24.202		
7,315.5	7,011.1	7,072.9	6,948.3	23.7	16.7	85.03	287.6	-109.6	796.7	763.6	33.09	24.076		
7,339.8	7,023.2	7,097.1	6,960.4	23.7	16.8	85.03	308.5	-109.6	796.7	763.3	33.40	23.850		
7,350.0	7,028.3	7,107.3	6,965.5	23.7	16.9	85.01	317.4	-109.6	796.7	763.1	33.53	23.759		
7,400.0	7,050.6	7,157.2	6,990.5	23.9	17.2	85.17	360.6	-109.6	796.3	762.1	34.19	23.291		
7,450.0	7,068.9	7,206.7	7,015.2	24.1	17.6	85.71	403.4	-109.6	795.4	760.5	34.89	22.797		
7,500.0	7,083.0	7,252.8	7,037.5	24.3	18.0	86.48	443.7	-109.6	794.2	758.5	35.66	22.271		
7,550.0	7,093.0	7,298.1	7,056.5	24.6	18.4	87.32	484.9	-109.6	793.0	756.5	36.51	21.721		
7,600.0	7,098.7	7,344.2	7,072.3	24.8	18.8	88.21	528.2	-109.6	791.7	754.3	37.44	21.144		
7,640.0	7,100.0	7,381.7	7,082.6	25.1	19.2	88.96	564.2	-109.6	790.7	752.4	38.26	20.669		
7,700.0	7,100.0	7,439.7	7,093.9	25.5	19.8	89.77	621.1	-109.6	789.3	749.7	39.60	19.931		
7,800.0	7,100.0	7,539.5	7,099.8	26.4	21.0	90.20	720.6	-109.6	787.3	745.3	42.02	18.738		
7,900.0	7,100.0	7,639.5	7,099.8	27.3	22.3	90.20	820.6	-109.6	785.3	740.7	44.61	17.602		
8,000.0	7,100.0	7,739.5	7,099.8	28.4	23.7	90.20	920.6	-109.6	783.3	735.9	47.37	16.534		
8,100.0	7,100.0	7,839.5	7,099.8	29.6	25.1	90.20	1,020.6	-109.6	781.2	731.0	50.28	15.538		
8,200.0	7,100.0	7,939.4	7,099.8	30.8	26.6	90.20	1,120.6	-109.6	779.2	725.9	53.30	14.618		
8,300.0	7,100.0	8,039.4	7,099.8	32.2	28.2	90.20	1,220.5	-109.6	777.2	720.8	56.43	13.772		
8,400.0	7,100.0	8,139.4	7,099.8	33.6	29.8	90.20	1,320.5	-109.6	775.2	715.5	59.64	12.997		
8,500.0	7,100.0	8,239.4	7,099.8	35.0	31.4	90.21	1,420.5	-109.6	773.1	710.2	62.93	12.286		
8,600.0	7,100.0	8,339.4	7,099.8	36.5	33.1	90.21	1,520.5	-109.6	771.1	704.8	66.27	11.636		
8,700.0	7,100.0	8,439.3	7,099.8	38.1	34.8	90.21	1,620.5	-109.6	769.1	699.4	69.67	11.039		
8,800.0	7,100.0	8,539.3	7,099.8	39.7	36.5	90.21	1,720.4	-109.6	767.0	693.9	73.11	10.491		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 2-8H - Wellbore #1 - Design #1												Offset Site Error: 0.0 usft	
Survey Program: 0-Sperry MWD												Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
8,900.0	7,100.0	8,639.3	7,099.8	41.3	38.3	90.21	1,820.4	-109.6	765.0	688.4	76.59	9.988	
9,000.0	7,100.0	8,739.3	7,099.8	42.9	40.0	90.21	1,920.4	-109.6	763.0	682.9	80.11	9.524	
9,100.0	7,100.0	8,839.3	7,099.8	44.6	41.8	90.21	2,020.4	-109.6	761.0	677.3	83.66	9.096	
9,200.0	7,100.0	8,939.2	7,099.8	46.3	43.6	90.21	2,120.3	-109.6	758.9	671.7	87.23	8.701	
9,300.0	7,100.0	9,039.2	7,099.8	48.0	45.4	90.21	2,220.3	-109.6	756.9	666.1	90.82	8.334	
9,400.0	7,100.0	9,139.2	7,099.8	49.7	47.2	90.21	2,320.3	-109.6	754.9	660.4	94.44	7.993	
9,500.0	7,100.0	9,239.2	7,099.8	51.4	49.0	90.21	2,420.3	-109.6	752.9	654.8	98.07	7.677	
9,600.0	7,100.0	9,339.2	7,099.8	53.2	50.9	90.21	2,520.3	-109.6	750.8	649.1	101.72	7.381	
9,700.0	7,100.0	9,439.1	7,099.8	54.9	52.7	90.21	2,620.2	-109.6	748.8	643.4	105.38	7.105	
9,800.0	7,100.0	9,539.1	7,099.8	56.7	54.5	90.21	2,720.2	-109.6	746.8	637.7	109.06	6.847	
9,900.0	7,100.0	9,639.1	7,099.8	58.5	56.4	90.21	2,820.2	-109.6	744.7	632.0	112.75	6.605	
10,000.0	7,100.0	9,739.1	7,099.8	60.2	58.2	90.21	2,920.2	-109.6	742.7	626.3	116.45	6.378	
10,100.0	7,100.0	9,839.1	7,099.8	62.0	60.1	90.21	3,020.2	-109.6	740.7	620.5	120.16	6.164	
10,200.0	7,100.0	9,939.0	7,099.8	63.8	62.0	90.22	3,120.1	-109.6	738.7	614.8	123.88	5.963	
10,300.0	7,100.0	10,039.0	7,099.8	65.7	63.8	90.22	3,220.1	-109.6	736.6	609.0	127.60	5.773	
10,400.0	7,100.0	10,139.0	7,099.8	67.5	65.7	90.22	3,320.1	-109.6	734.6	603.3	131.34	5.593	
10,500.0	7,100.0	10,239.0	7,099.8	69.3	67.6	90.22	3,420.1	-109.6	732.6	597.5	135.08	5.423	
10,600.0	7,100.0	10,338.9	7,099.8	71.1	69.4	90.22	3,520.1	-109.5	730.6	591.7	138.82	5.262	
10,700.0	7,100.0	10,438.9	7,099.8	73.0	71.3	90.22	3,620.0	-109.5	728.5	586.0	142.58	5.110	
10,800.0	7,100.0	10,538.9	7,099.8	74.8	73.2	90.22	3,720.0	-109.5	726.5	580.2	146.33	4.965	
10,900.0	7,100.0	10,638.9	7,099.8	76.6	75.1	90.22	3,820.0	-109.5	724.5	574.4	150.10	4.827	
11,000.0	7,100.0	10,738.9	7,099.8	78.5	77.0	90.22	3,920.0	-109.5	722.4	568.6	153.86	4.695	
11,100.0	7,100.0	10,838.8	7,099.8	80.3	78.9	90.22	4,020.0	-109.5	720.4	562.8	157.63	4.570	
11,200.0	7,100.0	10,938.8	7,099.8	82.2	80.8	90.22	4,119.9	-109.5	718.4	557.0	161.41	4.451	
11,300.0	7,100.0	11,038.8	7,099.8	84.0	82.6	90.22	4,219.9	-109.5	716.4	551.2	165.19	4.337	
11,400.0	7,100.0	11,138.8	7,099.8	85.9	84.5	90.22	4,319.9	-109.5	714.3	545.4	168.97	4.228	
11,500.0	7,100.0	11,238.8	7,099.8	87.7	86.4	90.22	4,419.9	-109.5	712.3	539.6	172.75	4.123	
11,600.0	7,100.0	11,338.7	7,099.8	89.6	88.3	90.22	4,519.9	-109.5	710.3	533.7	176.54	4.023	
11,700.0	7,100.0	11,438.7	7,099.8	91.5	90.2	90.22	4,619.8	-109.5	708.3	527.9	180.33	3.928	
11,800.0	7,100.0	11,538.7	7,099.8	93.3	92.1	90.22	4,719.8	-109.5	706.2	522.1	184.13	3.836	
11,900.0	7,100.0	11,638.7	7,099.8	95.2	94.0	90.23	4,819.8	-109.5	704.2	516.3	187.92	3.747	
12,000.0	7,100.0	11,738.7	7,099.8	97.1	95.9	90.23	4,919.8	-109.5	702.2	510.5	191.72	3.663	
12,100.0	7,100.0	11,838.6	7,099.8	99.0	97.7	90.23	5,019.8	-109.5	700.1	504.8	195.38	3.584	
12,117.8	7,100.0	11,853.4	7,099.8	99.3	97.9	90.23	5,034.5	-109.5	699.8	503.9	195.88	3.573 SF	

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 3-8H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.77	-2.3	169.8	169.8					
100.0	100.0	97.0	97.0	0.1	0.1	90.77	-2.3	169.8	169.8	169.6	0.18	929.732		
200.0	200.0	197.0	197.0	0.3	0.3	90.77	-2.3	169.8	169.8	169.1	0.63	270.238		
300.0	300.0	297.0	297.0	0.5	0.5	90.77	-2.3	169.8	169.8	168.7	1.08	157.521		
400.0	400.0	397.0	397.0	0.8	0.8	90.77	-2.3	169.8	169.8	168.2	1.53	111.158		
500.0	500.0	497.0	497.0	1.0	1.0	90.77	-2.3	169.8	169.8	167.8	1.98	85.880 CC, ES		
600.0	600.0	595.7	595.7	1.2	1.2	90.39	-1.2	170.3	170.3	167.9	2.42	70.310		
700.0	700.0	695.6	695.6	1.4	1.4	89.86	0.4	171.1	171.1	168.3	2.87	59.622		
800.0	800.0	795.6	795.6	1.7	1.7	89.32	2.0	171.9	171.9	168.6	3.32	51.813		
900.0	900.0	895.6	895.6	1.9	1.9	88.79	3.6	172.7	172.8	169.0	3.77	45.861		
1,000.0	1,000.0	995.6	995.5	2.1	2.1	88.27	5.2	173.5	173.6	169.4	4.22	41.177		
1,100.0	1,100.0	1,095.6	1,095.5	2.3	2.3	87.75	6.8	174.3	174.5	169.8	4.67	37.396		
1,200.0	1,200.0	1,195.6	1,195.5	2.6	2.6	87.24	8.4	175.1	175.3	170.2	5.11	34.280		
1,300.0	1,300.0	1,295.6	1,295.4	2.8	2.8	86.73	10.0	175.9	176.2	170.6	5.56	31.670		
1,400.0	1,400.0	1,395.5	1,395.4	3.0	3.0	86.23	11.6	176.7	177.1	171.1	6.01	29.451		
1,500.0	1,500.0	1,495.5	1,495.4	3.2	3.2	85.73	13.2	177.5	178.0	171.6	6.46	27.543		
1,600.0	1,600.0	1,595.5	1,595.3	3.5	3.5	85.24	14.8	178.3	178.9	172.0	6.91	25.885		
1,700.0	1,700.0	1,695.5	1,695.3	3.7	3.7	84.76	16.4	179.1	179.9	172.5	7.36	24.431		
1,800.0	1,800.0	1,797.1	1,796.9	3.9	3.9	84.37	17.7	179.8	180.6	172.8	7.80	23.149		
1,900.0	1,900.0	1,897.2	1,897.0	4.1	4.1	84.37	17.7	179.8	180.6	172.4	8.22	21.962		
2,000.0	2,000.0	1,997.2	1,997.0	4.4	4.3	84.37	17.7	179.8	180.6	172.0	8.67	20.830		
2,100.0	2,100.0	2,097.2	2,097.0	4.6	4.5	84.37	17.7	179.8	180.6	171.5	9.12	19.807		
2,200.0	2,200.0	2,197.2	2,197.0	4.8	4.8	84.37	17.7	179.8	180.6	171.1	9.57	18.880		
2,300.0	2,300.0	2,297.2	2,297.0	5.0	5.0	84.37	17.7	179.8	180.6	170.6	10.02	18.035		
2,400.0	2,400.0	2,397.2	2,397.0	5.3	5.2	84.37	17.7	179.8	180.6	170.2	10.46	17.262		
2,500.0	2,500.0	2,497.2	2,497.0	5.5	5.4	84.37	17.7	179.8	180.6	169.7	10.91	16.553		
2,600.0	2,600.0	2,597.2	2,597.0	5.7	5.7	84.37	17.7	179.8	180.6	169.3	11.36	15.899		
2,700.0	2,700.0	2,697.2	2,697.0	5.9	5.9	84.37	17.7	179.8	180.6	168.8	11.81	15.295		
2,800.0	2,800.0	2,797.2	2,797.0	6.2	6.1	84.37	17.7	179.8	180.6	168.4	12.26	14.736		
2,900.0	2,900.0	2,891.4	2,891.2	6.4	6.3	84.34	17.9	181.2	182.2	169.5	12.69	14.359		
3,000.0	3,000.0	2,985.3	2,984.9	6.6	6.5	84.26	18.7	185.7	187.0	173.9	13.11	14.260		
3,100.0	3,100.0	3,078.7	3,078.1	6.8	6.7	84.12	19.9	193.1	195.1	181.5	13.54	14.403		
3,200.0	3,200.0	3,171.6	3,170.3	7.1	6.9	83.94	21.6	203.5	206.4	192.4	13.98	14.760		
3,300.0	3,300.0	3,267.8	3,265.6	7.3	7.2	83.75	23.8	216.8	220.4	205.9	14.44	15.261		
3,400.0	3,400.0	3,366.8	3,363.6	7.5	7.4	83.56	26.0	230.8	234.6	219.7	14.91	15.734		
3,500.0	3,500.0	3,465.7	3,461.5	7.7	7.7	83.40	28.3	244.7	248.9	233.5	15.39	16.170		
3,600.0	3,600.0	3,564.4	3,559.2	7.9	7.9	-176.03	30.6	258.6	264.9	249.2	15.67	16.903		
3,700.0	3,699.8	3,662.5	3,656.3	8.1	8.2	-176.20	32.8	272.4	284.3	268.2	16.05	17.706		
3,800.0	3,799.5	3,759.9	3,752.7	8.3	8.5	-176.38	35.1	286.1	307.1	290.6	16.43	18.694		
3,900.0	3,898.7	3,856.4	3,848.2	8.6	8.7	-176.57	37.3	299.7	333.3	316.5	16.78	19.856		
4,000.0	3,997.5	3,951.9	3,942.7	8.8	9.0	-176.76	39.5	313.2	362.8	345.7	17.13	21.182		
4,100.0	4,095.6	4,046.3	4,036.2	9.0	9.3	-176.94	41.7	326.5	395.7	378.2	17.46	22.664		
4,200.0	4,193.1	4,139.5	4,128.4	9.3	9.6	-177.11	43.8	339.6	431.8	414.1	17.78	24.294		
4,300.0	4,289.6	4,231.5	4,219.4	9.6	9.8	-177.27	45.9	352.6	471.2	453.1	18.08	26.065		
4,406.0	4,391.0	4,327.3	4,314.3	10.0	10.1	-177.42	48.1	366.1	516.4	498.0	18.38	28.090		
4,500.0	4,480.3	4,411.6	4,397.7	10.3	10.4	-177.58	50.1	377.9	558.1	539.3	18.77	29.734		
4,600.0	4,575.4	4,501.2	4,486.4	10.7	10.7	-177.72	52.1	390.6	602.4	583.2	19.18	31.400		
4,700.0	4,670.4	4,590.8	4,575.1	11.2	10.9	-177.85	54.2	403.2	646.7	627.1	19.61	32.986		
4,800.0	4,765.4	4,680.5	4,663.8	11.6	11.2	-177.96	56.2	415.8	691.1	671.0	20.03	34.496		
4,900.0	4,860.5	4,770.1	4,752.5	12.1	11.5	-178.05	58.3	428.4	735.4	714.9	20.47	35.933		
5,000.0	4,955.5	4,859.7	4,841.2	12.6	11.8	-178.13	60.4	441.1	779.7	758.8	20.90	37.303		
5,100.0	5,050.6	4,949.3	4,929.9	13.1	12.1	-178.21	62.4	453.7	824.1	802.7	21.34	38.608		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 3-8H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,145.6	5,039.0	5,018.7	13.7	12.4	-178.28	64.5	466.3	868.4	846.6	21.79	39.853		
5,300.0	5,240.6	5,128.6	5,107.4	14.2	12.6	-178.34	66.6	478.9	912.7	890.5	22.24	41.040		
5,400.0	5,335.7	5,218.2	5,196.1	14.7	12.9	-178.39	68.6	491.6	957.1	934.4	22.69	42.173		
5,500.0	5,430.7	5,307.9	5,284.8	15.3	13.2	-178.44	70.7	504.2	1,001.4	978.3	23.15	43.255		
5,600.0	5,525.8	5,397.5	5,373.5	15.9	13.5	-178.49	72.7	516.8	1,045.7	1,022.1	23.61	44.289		
5,700.0	5,620.8	5,487.1	5,462.2	16.4	13.8	-178.53	74.8	529.4	1,090.1	1,066.0	24.08	45.277		
5,800.0	5,715.8	5,576.8	5,550.9	17.0	14.1	-178.57	76.9	542.1	1,134.4	1,109.9	24.54	46.222		
5,900.0	5,810.9	5,666.4	5,639.6	17.6	14.4	-178.61	78.9	554.7	1,178.8	1,153.7	25.01	47.126		
6,000.0	5,905.9	5,756.0	5,728.3	18.2	14.7	-178.64	81.0	567.3	1,223.1	1,197.6	25.49	47.992		
6,100.0	6,001.0	5,845.6	5,817.1	18.8	15.0	-178.67	83.0	579.9	1,267.4	1,241.5	25.96	48.822		
6,200.0	6,096.0	5,935.3	5,905.8	19.4	15.3	-178.70	85.1	592.6	1,311.8	1,285.3	26.44	49.617		
6,300.0	6,191.0	6,024.9	5,994.5	20.0	15.6	-178.73	87.2	605.2	1,356.1	1,329.2	26.92	50.380		
6,400.0	6,286.1	6,114.5	6,083.2	20.6	15.9	-178.75	89.2	617.8	1,400.5	1,373.1	27.40	51.112		
6,500.0	6,381.1	6,204.2	6,171.9	21.2	16.2	-178.78	91.3	630.4	1,444.8	1,416.9	27.88	51.815		
6,541.3	6,420.4	6,241.2	6,208.6	21.5	16.3	-178.79	92.1	635.7	1,463.1	1,435.0	28.08	52.097		
6,550.0	6,428.7	6,249.0	6,216.3	21.5	16.3	178.28	92.3	636.8	1,467.0	1,438.8	28.14	52.122		
6,600.0	6,476.4	6,294.1	6,261.0	21.8	16.5	160.40	93.4	643.1	1,488.2	1,459.7	28.52	52.191		
6,650.0	6,524.2	6,339.5	6,305.9	22.0	16.6	142.64	94.4	649.5	1,508.1	1,479.2	28.90	52.176		
6,700.0	6,571.6	6,384.8	6,350.7	22.2	16.8	127.28	95.4	655.9	1,526.4	1,497.2	29.28	52.125		
6,750.0	6,618.4	6,429.7	6,395.1	22.4	16.9	115.26	96.5	662.2	1,543.2	1,513.6	29.64	52.072		
6,800.0	6,664.1	6,473.7	6,438.7	22.6	17.1	106.27	97.5	668.4	1,558.4	1,528.4	29.95	52.035		
6,850.0	6,708.4	6,493.7	6,458.5	22.7	17.1	99.24	98.0	671.3	1,572.2	1,542.0	30.18	52.087		
6,900.0	6,751.0	6,500.0	6,464.7	22.9	17.2	93.59	98.3	672.3	1,585.2	1,554.9	30.36	52.214		
6,950.0	6,791.5	6,519.5	6,483.8	23.0	17.2	89.42	99.3	675.7	1,597.3	1,566.8	30.52	52.335		
7,000.0	6,829.7	6,531.7	6,495.8	23.1	17.3	86.00	100.2	678.0	1,608.6	1,578.0	30.64	52.508		
7,050.0	6,865.2	6,550.0	6,513.6	23.2	17.4	83.42	101.9	681.9	1,619.0	1,588.3	30.74	52.675		
7,100.0	6,897.8	6,550.0	6,513.6	23.3	17.4	80.93	101.9	681.9	1,628.4	1,597.6	30.77	52.919		
7,150.0	6,927.2	6,550.0	6,513.6	23.4	17.4	78.85	101.9	681.9	1,637.1	1,606.3	30.79	53.173		
7,189.8	6,948.2	6,573.1	6,535.9	23.4	17.5	78.12	104.7	687.4	1,643.0	1,612.1	30.88	53.203		
7,200.0	6,953.3	6,575.1	6,537.8	23.4	17.5	78.17	104.9	687.9	1,644.5	1,613.5	30.94	53.149		
7,300.0	7,003.3	6,600.0	6,561.5	23.6	17.6	78.86	108.6	694.5	1,662.2	1,630.5	31.61	52.589		
7,339.8	7,023.2	6,600.0	6,561.5	23.7	17.6	78.86	108.6	694.5	1,670.6	1,638.7	31.87	52.413		
7,350.0	7,028.3	6,600.0	6,561.5	23.7	17.6	78.61	108.6	694.5	1,672.9	1,640.9	31.91	52.418		
7,400.0	7,050.6	6,600.0	6,561.5	23.9	17.6	77.37	108.6	694.5	1,684.3	1,652.2	32.11	52.457		
7,450.0	7,068.9	6,624.9	6,584.8	24.1	17.7	76.89	113.0	701.9	1,695.5	1,663.1	32.41	52.310		
7,500.0	7,083.0	6,633.0	6,592.4	24.3	17.8	75.94	114.6	704.4	1,707.1	1,674.5	32.65	52.287		
7,550.0	7,093.0	6,650.0	6,608.0	24.6	17.9	75.28	118.2	710.0	1,718.9	1,686.0	32.94	52.185		
7,600.0	7,098.7	6,650.0	6,608.0	24.8	17.9	74.12	118.2	710.0	1,730.6	1,697.5	33.13	52.240		
7,640.0	7,100.0	6,650.0	6,608.0	25.1	17.9	73.19	118.2	710.0	1,740.0	1,706.8	33.27	52.297		
7,700.0	7,100.0	6,650.0	6,608.0	25.5	17.9	73.19	118.2	710.0	1,755.1	1,721.2	33.88	51.802		
7,800.0	7,100.0	6,664.8	6,621.5	26.4	18.0	73.68	121.6	715.2	1,784.3	1,749.2	35.11	50.826		
7,900.0	7,100.0	6,675.4	6,631.0	27.3	18.0	74.02	124.2	719.0	1,818.5	1,782.1	36.41	49.948		
8,000.0	7,100.0	6,700.0	6,652.8	28.4	18.2	74.82	130.7	728.3	1,857.3	1,819.4	37.91	48.991		
8,100.0	7,100.0	6,700.0	6,652.8	29.6	18.2	74.82	130.7	728.3	1,900.3	1,861.0	39.30	48.359		
8,200.0	7,100.0	6,714.4	6,665.3	30.8	18.3	75.27	134.8	734.1	1,947.3	1,906.4	40.86	47.654		
8,300.0	7,100.0	6,730.5	6,679.2	32.2	18.4	75.78	139.7	740.8	1,998.0	1,955.5	42.50	47.010		
8,400.0	7,100.0	6,750.0	6,695.6	33.6	18.5	76.38	146.0	749.3	2,052.1	2,007.8	44.21	46.411		
8,500.0	7,100.0	8,314.2	7,100.0	35.0	35.8	90.08	1,420.5	1,190.9	2,073.6	2,010.6	63.05	32.891		
8,600.0	7,100.0	8,414.1	7,100.0	36.5	37.2	90.08	1,520.4	1,190.9	2,071.6	2,005.3	66.27	31.259		
8,700.0	7,100.0	8,514.1	7,100.0	38.1	38.5	90.08	1,620.4	1,190.9	2,069.6	2,000.0	69.56	29.750		
8,800.0	7,100.0	8,614.1	7,100.0	39.7	40.0	90.08	1,720.4	1,190.9	2,067.5	1,994.6	72.91	28.357		
8,900.0	7,100.0	8,714.1	7,100.0	41.3	41.4	90.08	1,820.4	1,190.9	2,065.5	1,989.2	76.31	27.069		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 3-8H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,000.0	7,100.0	8,814.1	7,100.0	42.9	42.9	90.08	1,920.3	1,190.9	2,063.5	1,983.8	79.74	25.877		
9,100.0	7,100.0	8,914.0	7,100.0	44.6	44.4	90.08	2,020.3	1,190.9	2,061.5	1,978.3	83.21	24.773		
9,200.0	7,100.0	9,014.0	7,100.0	46.3	46.0	90.08	2,120.3	1,190.9	2,059.4	1,972.7	86.72	23.748		
9,300.0	7,100.0	9,114.0	7,100.0	48.0	47.6	90.08	2,220.3	1,190.9	2,057.4	1,967.2	90.25	22.796		
9,400.0	7,100.0	9,214.0	7,100.0	49.7	49.2	90.08	2,320.3	1,190.9	2,055.4	1,961.6	93.81	21.910		
9,500.0	7,100.0	9,314.0	7,100.0	51.4	50.9	90.08	2,420.2	1,190.9	2,053.4	1,956.0	97.39	21.083		
9,600.0	7,100.0	9,413.9	7,100.0	53.2	52.5	90.08	2,520.2	1,190.9	2,051.3	1,950.3	100.99	20.312		
9,700.0	7,100.0	9,513.9	7,100.0	54.9	54.2	90.08	2,620.2	1,190.9	2,049.3	1,944.7	104.61	19.589		
9,800.0	7,100.0	9,613.9	7,100.0	56.7	55.9	90.08	2,720.2	1,190.9	2,047.3	1,939.0	108.25	18.913		
9,900.0	7,100.0	9,713.9	7,100.0	58.5	57.6	90.08	2,820.2	1,190.9	2,045.3	1,933.4	111.90	18.278		
10,000.0	7,100.0	9,813.8	7,100.0	60.2	59.3	90.08	2,920.1	1,190.9	2,043.2	1,927.7	115.56	17.681		
10,100.0	7,100.0	9,913.8	7,100.0	62.0	61.1	90.08	3,020.1	1,190.9	2,041.2	1,922.0	119.24	17.119		
10,200.0	7,100.0	10,013.8	7,100.0	63.8	62.8	90.08	3,120.1	1,191.0	2,039.2	1,916.3	122.92	16.589		
10,300.0	7,100.0	10,113.8	7,100.0	65.7	64.6	90.08	3,220.1	1,191.0	2,037.1	1,910.5	126.62	16.089		
10,400.0	7,100.0	10,213.8	7,100.0	67.5	66.4	90.08	3,320.1	1,191.0	2,035.1	1,904.8	130.32	15.616		
10,500.0	7,100.0	10,313.7	7,100.0	69.3	68.2	90.08	3,420.0	1,191.0	2,033.1	1,899.1	134.04	15.168		
10,600.0	7,100.0	10,413.7	7,100.0	71.1	69.9	90.08	3,520.0	1,191.0	2,031.1	1,893.3	137.76	14.744		
10,700.0	7,100.0	10,513.7	7,100.0	73.0	71.7	90.08	3,620.0	1,191.0	2,029.0	1,887.6	141.49	14.341		
10,800.0	7,100.0	10,613.7	7,100.0	74.8	73.5	90.08	3,720.0	1,191.0	2,027.0	1,881.8	145.22	13.958		
10,900.0	7,100.0	10,713.7	7,100.0	76.6	75.4	90.08	3,820.0	1,191.0	2,025.0	1,876.0	148.96	13.594		
11,000.0	7,100.0	10,813.6	7,100.0	78.5	77.2	90.08	3,919.9	1,191.0	2,023.0	1,870.2	152.71	13.247		
11,100.0	7,100.0	10,913.6	7,100.0	80.3	79.0	90.08	4,019.9	1,191.0	2,020.9	1,864.5	156.46	12.916		
11,200.0	7,100.0	11,013.6	7,100.0	82.2	80.8	90.08	4,119.9	1,191.0	2,018.9	1,858.7	160.22	12.601		
11,300.0	7,100.0	11,113.6	7,100.0	84.0	82.7	90.08	4,219.9	1,191.0	2,016.9	1,852.9	163.98	12.300		
11,400.0	7,100.0	11,213.6	7,100.0	85.9	84.5	90.08	4,319.9	1,191.0	2,014.8	1,847.1	167.74	12.011		
11,500.0	7,100.0	11,313.5	7,100.0	87.7	86.3	90.08	4,419.8	1,191.0	2,012.8	1,841.3	171.51	11.736		
11,600.0	7,100.0	11,413.5	7,100.0	89.6	88.2	90.08	4,519.8	1,191.0	2,010.8	1,835.5	175.29	11.471		
11,700.0	7,100.0	11,513.5	7,100.0	91.5	90.0	90.09	4,619.8	1,191.0	2,008.8	1,829.7	179.06	11.218		
11,800.0	7,100.0	11,613.5	7,100.0	93.3	91.9	90.09	4,719.8	1,191.0	2,006.7	1,823.9	182.84	10.975		
11,900.0	7,100.0	11,713.5	7,100.0	95.2	93.7	90.09	4,819.8	1,191.0	2,004.7	1,818.1	186.63	10.742		
12,000.0	7,100.0	11,813.4	7,100.0	97.1	95.6	90.09	4,919.7	1,191.0	2,002.7	1,812.3	190.41	10.518		
12,100.0	7,100.0	11,913.4	7,100.0	99.0	97.5	90.09	5,019.7	1,191.0	2,000.7	1,806.5	194.20	10.302		
12,117.8	7,100.0	11,931.2	7,100.0	99.3	97.8	90.09	5,037.5	1,191.0	2,000.3	1,805.5	194.81	10.268 SF		

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 4-8H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.79	-2.6	189.7	189.8					
100.0	100.0	97.0	97.0	0.1	0.1	90.79	-2.6	189.7	189.7	189.5	0.18	1,039.055		
200.0	200.0	197.0	197.0	0.3	0.3	90.79	-2.6	189.7	189.7	189.1	0.63	302.014		
300.0	300.0	297.0	297.0	0.5	0.5	90.79	-2.6	189.7	189.7	188.7	1.08	176.044		
400.0	400.0	397.0	397.0	0.8	0.8	90.79	-2.6	189.7	189.7	188.2	1.53	124.228		
500.0	500.0	497.0	497.0	1.0	1.0	90.79	-2.6	189.7	189.7	187.8	1.98	95.978 CC, ES		
600.0	600.0	590.9	590.9	1.2	1.2	90.78	-2.6	191.2	191.3	188.9	2.40	79.641		
700.0	700.0	690.6	690.6	1.4	1.4	90.77	-2.6	194.4	194.6	191.7	2.83	68.655		
800.0	800.0	790.6	790.5	1.7	1.6	90.75	-2.6	197.7	197.9	194.6	3.27	60.456		
900.0	900.0	890.5	890.4	1.9	1.8	90.74	-2.6	201.0	201.2	197.5	3.72	54.130		
1,000.0	1,000.0	990.5	990.2	2.1	2.0	90.73	-2.6	204.3	204.5	200.3	4.16	49.116		
1,100.0	1,100.0	1,090.4	1,090.1	2.3	2.3	90.72	-2.6	207.6	207.8	203.2	4.61	45.051		
1,200.0	1,200.0	1,197.1	1,196.8	2.6	2.5	90.71	-2.6	209.7	209.7	204.7	5.06	41.456		
1,300.0	1,300.0	1,297.3	1,297.0	2.8	2.7	90.71	-2.6	209.7	209.7	204.2	5.49	38.235		
1,400.0	1,400.0	1,397.3	1,397.0	3.0	2.9	90.71	-2.6	209.7	209.7	203.8	5.92	35.403		
1,500.0	1,500.0	1,497.3	1,497.0	3.2	3.1	90.71	-2.6	209.7	209.7	203.4	6.36	32.952		
1,600.0	1,600.0	1,597.3	1,597.0	3.5	3.3	90.71	-2.6	209.7	209.7	202.9	6.81	30.814		
1,700.0	1,700.0	1,697.3	1,697.0	3.7	3.6	90.71	-2.6	209.7	209.7	202.5	7.25	28.932		
1,800.0	1,800.0	1,797.3	1,797.0	3.9	3.8	90.71	-2.6	209.7	209.7	202.0	7.69	27.264		
1,900.0	1,900.0	1,897.3	1,897.0	4.1	4.0	90.71	-2.6	209.7	209.7	201.6	8.14	25.775		
2,000.0	2,000.0	1,997.3	1,997.0	4.4	4.2	90.71	-2.6	209.7	209.7	201.1	8.58	24.439		
2,100.0	2,100.0	2,097.3	2,097.0	4.6	4.4	90.71	-2.6	209.7	209.7	200.7	9.03	23.234		
2,200.0	2,200.0	2,197.3	2,197.0	4.8	4.7	90.71	-2.6	209.7	209.7	200.3	9.47	22.141		
2,300.0	2,300.0	2,297.3	2,297.0	5.0	4.9	90.71	-2.6	209.7	209.7	199.8	9.92	21.145		
2,400.0	2,400.0	2,397.3	2,397.0	5.3	5.1	90.71	-2.6	209.7	209.7	199.4	10.36	20.235		
2,500.0	2,500.0	2,497.3	2,497.0	5.5	5.3	90.71	-2.6	209.7	209.7	198.9	10.81	19.399		
2,600.0	2,600.0	2,597.3	2,597.0	5.7	5.5	90.71	-2.6	209.7	209.7	198.5	11.26	18.629		
2,700.0	2,700.0	2,697.3	2,697.0	5.9	5.8	90.71	-2.6	209.7	209.7	198.0	11.71	17.918		
2,800.0	2,800.0	2,797.3	2,797.0	6.2	6.0	90.71	-2.6	209.7	209.7	197.6	12.15	17.258		
2,900.0	2,900.0	2,897.3	2,897.0	6.4	6.2	90.71	-2.6	209.7	209.7	197.1	12.60	16.646		
3,000.0	3,000.0	2,997.3	2,997.0	6.6	6.4	90.71	-2.6	209.7	209.7	196.7	13.05	16.075		
3,100.0	3,100.0	3,097.3	3,097.0	6.8	6.7	90.71	-2.6	209.7	209.7	196.2	13.49	15.541		
3,200.0	3,200.0	3,190.6	3,190.3	7.1	6.9	90.71	-2.6	211.2	211.3	197.4	13.92	15.175		
3,300.0	3,300.0	3,283.6	3,283.1	7.3	7.1	90.69	-2.6	215.6	216.1	201.7	14.35	15.060		
3,400.0	3,400.0	3,376.1	3,375.4	7.5	7.3	90.67	-2.6	223.1	224.1	209.3	14.78	15.164		
3,500.0	3,500.0	3,468.1	3,466.8	7.7	7.5	90.64	-2.6	233.4	235.3	220.1	15.22	15.465		
3,600.0	3,600.0	3,559.1	3,556.8	7.9	7.7	-168.68	-2.6	246.5	251.4	235.9	15.56	16.160		
3,700.0	3,699.8	3,648.3	3,644.7	8.1	7.9	-168.82	-2.6	262.1	274.0	258.1	15.93	17.202		
3,800.0	3,799.5	3,735.3	3,729.8	8.3	8.2	-169.02	-2.6	280.0	302.8	286.5	16.28	18.601		
3,900.0	3,898.7	3,819.6	3,811.7	8.6	8.5	-169.25	-2.6	299.7	337.7	321.1	16.62	20.324		
4,000.0	3,997.5	3,902.4	3,891.6	8.8	8.7	-169.47	-2.6	321.4	378.5	361.5	16.94	22.338		
4,100.0	4,095.6	3,991.8	3,977.7	9.0	9.1	-169.73	-2.6	345.7	423.2	406.0	17.26	24.517		
4,200.0	4,193.1	4,079.5	4,062.1	9.3	9.4	-169.98	-2.6	369.6	471.1	453.5	17.57	26.810		
4,300.0	4,289.6	4,165.6	4,144.9	9.6	9.8	-170.20	-2.6	392.9	521.9	504.0	17.86	29.215		
4,406.0	4,391.0	4,254.8	4,230.8	10.0	10.1	-170.42	-2.6	417.2	579.0	560.9	18.16	31.879		
4,500.0	4,480.3	4,333.0	4,306.0	10.3	10.5	-170.78	-2.6	438.4	631.1	612.6	18.54	34.048		
4,600.0	4,575.4	4,416.1	4,386.0	10.7	10.8	-171.11	-2.6	461.0	686.6	667.6	18.94	36.249		
4,700.0	4,670.4	4,499.3	4,466.1	11.2	11.2	-171.38	-2.6	483.6	742.0	722.7	19.35	38.343		
4,800.0	4,765.4	4,582.5	4,546.1	11.6	11.6	-171.62	-2.6	506.2	797.5	777.7	19.77	40.335		
4,900.0	4,860.5	4,665.6	4,626.1	12.1	12.0	-171.82	-2.6	528.8	853.0	832.8	20.20	42.232		
5,000.0	4,955.5	4,748.8	4,706.2	12.6	12.4	-172.00	-2.6	551.4	908.5	887.8	20.63	44.037		
5,100.0	5,050.6	4,832.0	4,786.2	13.1	12.8	-172.16	-2.6	574.0	964.0	942.9	21.07	45.757		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 4-8H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,145.6	4,915.1	4,866.3	13.7	13.2	-172.30	-2.6	596.6	1,019.5	998.0	21.51	47.394		
5,300.0	5,240.6	4,998.3	4,946.3	14.2	13.6	-172.43	-2.6	619.2	1,075.0	1,053.0	21.96	48.955		
5,400.0	5,335.7	5,081.4	5,026.3	14.7	14.1	-172.55	-2.6	641.8	1,130.5	1,108.1	22.41	50.442		
5,500.0	5,430.7	5,164.6	5,106.4	15.3	14.5	-172.65	-2.6	664.4	1,186.0	1,163.1	22.87	51.860		
5,600.0	5,525.8	5,247.8	5,186.4	15.9	14.9	-172.75	-2.6	687.0	1,241.5	1,218.1	23.33	53.213		
5,700.0	5,620.8	5,330.9	5,266.4	16.4	15.3	-172.83	-2.6	709.6	1,297.0	1,273.2	23.80	54.505		
5,800.0	5,715.8	5,414.1	5,346.5	17.0	15.8	-172.91	-2.6	732.2	1,352.5	1,328.2	24.27	55.739		
5,900.0	5,810.9	5,497.3	5,426.5	17.6	16.2	-172.99	-2.6	754.8	1,408.0	1,383.3	24.74	56.917		
6,000.0	5,905.9	5,580.4	5,506.5	18.2	16.6	-173.05	-2.6	777.4	1,463.5	1,438.3	25.21	58.043		
6,100.0	6,001.0	5,663.6	5,586.6	18.8	17.1	-173.12	-2.6	799.9	1,519.0	1,493.4	25.69	59.120		
6,200.0	6,096.0	5,746.7	5,666.6	19.4	17.5	-173.18	-2.6	822.5	1,574.6	1,548.4	26.18	60.151		
6,300.0	6,191.0	5,829.9	5,746.6	20.0	18.0	-173.23	-2.6	845.1	1,630.1	1,603.4	26.66	61.138		
6,400.0	6,286.1	5,913.1	5,826.7	20.6	18.4	-173.28	-2.6	867.7	1,685.6	1,658.5	27.15	62.083		
6,500.0	6,381.1	5,996.2	5,906.7	21.2	18.9	-173.33	-2.6	890.3	1,741.1	1,713.5	27.64	62.989		
6,541.3	6,420.4	6,030.6	5,939.8	21.5	19.1	-173.35	-2.6	899.7	1,764.1	1,736.2	27.85	63.352		
6,550.0	6,428.7	6,037.8	5,946.7	21.5	19.1	-176.44	-2.6	901.6	1,768.9	1,741.0	27.90	63.409		
6,600.0	6,476.4	6,079.7	5,987.1	21.8	19.3	164.76	-2.6	913.0	1,796.0	1,767.8	28.26	63.556		
6,650.0	6,524.2	6,121.9	6,027.6	22.0	19.6	146.06	-2.6	924.5	1,822.1	1,793.4	28.71	63.475		
6,700.0	6,571.6	6,164.0	6,068.1	22.2	19.8	129.77	-2.6	935.9	1,847.0	1,817.8	29.19	63.280		
6,750.0	6,618.4	6,205.6	6,108.2	22.4	20.0	116.84	-2.6	947.2	1,870.5	1,840.9	29.66	63.069		
6,800.0	6,664.1	6,246.6	6,147.6	22.6	20.2	106.96	-2.6	958.4	1,892.6	1,862.5	30.09	62.906		
6,850.0	6,708.4	6,286.5	6,186.1	22.7	20.5	99.48	-2.6	969.2	1,913.3	1,882.8	30.45	62.830		
6,900.0	6,751.0	6,325.1	6,223.2	22.9	20.7	93.76	-2.6	979.7	1,932.4	1,901.6	30.74	62.855		
6,950.0	6,791.5	6,362.1	6,258.8	23.0	20.9	89.35	-2.6	989.7	1,950.0	1,919.0	30.96	62.980		
7,000.0	6,829.7	6,397.1	6,292.5	23.1	21.1	85.91	-2.6	999.3	1,966.0	1,934.9	31.11	63.187		
7,050.0	6,865.2	6,430.0	6,324.2	23.2	21.2	83.21	-2.6	1,008.2	1,980.6	1,949.4	31.21	63.454		
7,100.0	6,897.8	6,460.5	6,353.5	23.3	21.4	81.09	-2.6	1,016.5	1,993.7	1,962.4	31.27	63.751		
7,150.0	6,927.2	6,488.3	6,380.2	23.4	21.6	79.41	-2.6	1,024.0	2,005.4	1,974.1	31.31	64.047		
7,189.8	6,948.2	6,508.4	6,399.5	23.4	21.7	78.33	-2.6	1,029.5	2,013.7	1,982.4	31.34	64.258		
7,200.0	6,953.3	6,513.3	6,404.3	23.4	21.7	78.45	-2.6	1,030.8	2,015.7	1,984.3	31.40	64.187		
7,300.0	7,003.3	6,550.0	6,439.6	23.6	21.9	79.38	-2.6	1,040.8	2,037.8	2,005.7	32.08	63.514		
7,339.8	7,023.2	6,550.0	6,439.6	23.7	21.9	79.38	-2.6	1,040.8	2,047.7	2,015.4	32.35	63.300		
7,350.0	7,028.3	6,550.0	6,439.6	23.7	21.9	79.09	-2.6	1,040.8	2,050.4	2,018.0	32.39	63.301		
7,400.0	7,050.6	6,550.0	6,439.6	23.9	21.9	77.68	-2.6	1,040.8	2,063.4	2,030.8	32.58	63.327		
7,450.0	7,068.9	6,550.0	6,439.6	24.1	21.9	76.29	-2.6	1,040.8	2,076.5	2,043.8	32.76	63.395		
7,500.0	7,083.0	6,550.0	6,439.6	24.3	21.9	74.94	-2.6	1,040.8	2,089.6	2,056.7	32.91	63.502		
7,550.0	7,093.0	6,569.7	6,458.4	24.6	22.0	74.17	-2.5	1,046.6	2,102.2	2,069.1	33.14	63.429		
7,600.0	7,098.7	6,571.1	6,459.8	24.8	22.0	72.95	-2.5	1,047.0	2,114.9	2,081.6	33.28	63.547		
7,640.0	7,100.0	6,571.5	6,460.2	25.1	22.0	71.99	-2.5	1,047.2	2,124.8	2,091.5	33.38	63.651		
7,700.0	7,100.0	6,571.8	6,460.4	25.5	22.0	71.99	-2.5	1,047.3	2,140.4	2,106.4	33.99	62.974		
7,800.0	7,100.0	6,572.2	6,460.8	26.4	22.0	72.00	-2.5	1,047.4	2,169.8	2,134.7	35.09	61.832		
7,900.0	7,100.0	6,572.5	6,461.1	27.3	22.0	72.01	-2.5	1,047.5	2,203.4	2,167.1	36.30	60.701		
8,000.0	7,100.0	6,572.9	6,461.5	28.4	22.0	72.02	-2.5	1,047.6	2,240.9	2,203.3	37.59	59.611		
8,100.0	7,100.0	6,573.3	6,461.9	29.6	22.0	72.04	-2.5	1,047.7	2,282.1	2,243.2	38.96	58.579		
8,200.0	7,100.0	6,573.7	6,462.3	30.8	22.1	72.05	-2.5	1,047.9	2,327.0	2,286.6	40.39	57.619		
8,300.0	7,100.0	6,574.2	6,462.7	32.2	22.1	72.06	-2.5	1,048.0	2,375.2	2,333.3	41.86	56.735		
8,400.0	7,100.0	6,574.6	6,463.1	33.6	22.1	72.07	-2.4	1,048.1	2,426.6	2,383.2	43.39	55.929		
8,500.0	7,100.0	6,575.0	6,463.5	35.0	22.1	72.08	-2.4	1,048.3	2,480.9	2,436.0	44.95	55.198		
8,600.0	7,100.0	6,575.5	6,463.9	36.5	22.1	72.10	-2.4	1,048.4	2,538.0	2,491.5	46.54	54.538		
8,700.0	7,100.0	6,575.9	6,464.4	38.1	22.1	72.11	-2.4	1,048.6	2,597.8	2,549.6	48.15	53.946		
8,800.0	7,100.0	6,576.4	6,464.8	39.7	22.1	72.12	-2.4	1,048.7	2,659.9	2,610.1	49.80	53.416		
8,900.0	7,100.0	6,576.9	6,465.3	41.3	22.1	72.13	-2.4	1,048.9	2,724.3	2,672.8	51.46	52.943		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 0780 4-8H - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,000.0	7,100.0	9,253.6	7,100.0	42.9	49.6	90.06	1,920.5	1,851.3	2,723.9	2,643.4	80.55	33.815		
9,100.0	7,100.0	9,353.6	7,100.0	44.6	50.8	90.06	2,020.4	1,851.3	2,721.9	2,637.9	84.01	32.399		
9,200.0	7,100.0	9,453.5	7,100.0	46.3	52.1	90.06	2,120.4	1,851.3	2,719.9	2,632.4	87.50	31.083		
9,300.0	7,100.0	9,553.5	7,100.0	48.0	53.4	90.06	2,220.4	1,851.3	2,717.8	2,626.8	91.03	29.858		
9,400.0	7,100.0	9,653.5	7,100.0	49.7	54.7	90.06	2,320.4	1,851.3	2,715.8	2,621.2	94.57	28.717		
9,500.0	7,100.0	9,753.5	7,100.0	51.4	56.1	90.06	2,420.4	1,851.3	2,713.8	2,615.6	98.14	27.651		
9,600.0	7,100.0	9,853.5	7,100.0	53.2	57.6	90.06	2,520.3	1,851.3	2,711.7	2,610.0	101.73	26.656		
9,700.0	7,100.0	9,953.4	7,100.0	54.9	59.1	90.06	2,620.3	1,851.3	2,709.7	2,604.4	105.34	25.723		
9,800.0	7,100.0	10,053.4	7,100.0	56.7	60.6	90.06	2,720.3	1,851.3	2,707.7	2,598.7	108.97	24.848		
9,900.0	7,100.0	10,153.4	7,100.0	58.5	62.1	90.06	2,820.3	1,851.3	2,705.6	2,593.0	112.61	24.027		
10,000.0	7,100.0	10,253.4	7,100.0	60.2	63.7	90.06	2,920.3	1,851.3	2,703.6	2,587.3	116.26	23.254		
10,100.0	7,100.0	10,353.4	7,100.0	62.0	65.2	90.06	3,020.2	1,851.3	2,701.6	2,581.6	119.93	22.526		
10,200.0	7,100.0	10,453.3	7,100.0	63.8	66.8	90.06	3,120.2	1,851.3	2,699.5	2,575.9	123.61	21.839		
10,300.0	7,100.0	10,553.3	7,100.0	65.7	68.5	90.06	3,220.2	1,851.3	2,697.5	2,570.2	127.30	21.190		
10,400.0	7,100.0	10,653.3	7,100.0	67.5	70.1	90.06	3,320.2	1,851.3	2,695.5	2,564.5	131.00	20.577		
10,500.0	7,100.0	10,753.3	7,100.0	69.3	71.8	90.06	3,420.2	1,851.3	2,693.4	2,558.7	134.70	19.995		
10,600.0	7,100.0	10,853.3	7,100.0	71.1	73.4	90.06	3,520.1	1,851.3	2,691.4	2,553.0	138.42	19.444		
10,700.0	7,100.0	10,953.2	7,100.0	73.0	75.1	90.06	3,620.1	1,851.3	2,689.4	2,547.2	142.14	18.920		
10,800.0	7,100.0	11,053.2	7,100.0	74.8	76.8	90.06	3,720.1	1,851.3	2,687.3	2,541.5	145.87	18.423		
10,900.0	7,100.0	11,153.2	7,100.0	76.6	78.6	90.06	3,820.1	1,851.3	2,685.3	2,535.7	149.61	17.949		
11,000.0	7,100.0	11,253.2	7,100.0	78.5	80.3	90.06	3,920.1	1,851.3	2,683.3	2,529.9	153.35	17.498		
11,100.0	7,100.0	11,353.2	7,100.0	80.3	82.0	90.06	4,020.0	1,851.3	2,681.3	2,524.2	157.09	17.068		
11,200.0	7,100.0	11,453.1	7,100.0	82.2	83.8	90.06	4,120.0	1,851.3	2,679.2	2,518.4	160.85	16.657		
11,300.0	7,100.0	11,553.1	7,100.0	84.0	85.5	90.06	4,220.0	1,851.3	2,677.2	2,512.6	164.60	16.265		
11,400.0	7,100.0	11,653.1	7,100.0	85.9	87.3	90.06	4,320.0	1,851.3	2,675.2	2,506.8	168.36	15.889		
11,500.0	7,100.0	11,753.1	7,100.0	87.7	89.1	90.06	4,419.9	1,851.3	2,673.1	2,501.0	172.13	15.530		
11,600.0	7,100.0	11,853.1	7,100.0	89.6	90.9	90.06	4,519.9	1,851.3	2,671.1	2,495.2	175.90	15.185		
11,700.0	7,100.0	11,953.0	7,100.0	91.5	92.6	90.06	4,619.9	1,851.3	2,669.1	2,489.4	179.67	14.855		
11,800.0	7,100.0	12,053.0	7,100.0	93.3	94.4	90.06	4,719.9	1,851.3	2,667.0	2,483.6	183.45	14.538		
11,900.0	7,100.0	12,153.0	7,100.0	95.2	96.2	90.06	4,819.9	1,851.3	2,665.0	2,477.8	187.23	14.234		
12,000.0	7,100.0	12,253.0	7,100.0	97.1	98.0	90.06	4,919.8	1,851.3	2,663.0	2,472.0	191.01	13.942		
12,100.0	7,100.0	12,353.0	7,100.0	99.0	99.9	90.06	5,019.8	1,851.3	2,660.9	2,466.1	194.79	13.660		
12,117.8	7,100.0	12,370.7	7,100.0	99.3	100.2	90.06	5,037.6	1,851.3	2,660.6	2,465.2	195.40	13.616 SF		

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 7-17H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 1031-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-149.25	-236.1	-140.5	274.7					
100.0	100.0	100.8	100.8	0.1	0.1	-149.29	-236.1	-140.2	274.6	274.4	0.21	1,327.868		
200.0	200.0	201.6	201.6	0.3	0.2	-149.40	-236.0	-139.5	274.2	273.6	0.55	500.942		
300.0	300.0	302.4	302.3	0.5	0.4	-149.59	-235.8	-138.4	273.4	272.6	0.89	308.028		
400.0	400.0	403.1	403.1	0.8	0.5	-149.86	-235.6	-136.8	272.4	271.2	1.23	221.850		
500.0	500.0	503.9	503.8	1.0	0.6	-150.21	-235.3	-134.7	271.2	269.6	1.57	172.911		
600.0	600.0	604.6	604.5	1.2	0.7	-150.64	-235.0	-132.2	269.6	267.7	1.91	141.291		
700.0	700.0	705.3	705.2	1.4	0.8	-151.15	-234.5	-129.2	267.8	265.6	2.25	119.129		
800.0	800.0	806.0	805.8	1.7	1.0	-151.75	-234.1	-125.8	265.8	263.2	2.59	102.701		
900.0	900.0	906.6	906.3	1.9	1.1	-152.44	-233.5	-121.9	263.5	260.6	2.93	90.011		
1,000.0	1,000.0	1,007.2	1,006.8	2.1	1.2	-153.23	-232.9	-117.5	261.0	257.7	3.27	79.897		
1,038.4	1,038.4	1,040.0	1,039.6	2.2	1.2	-153.50	-232.8	-116.1	260.1	256.7	3.40	76.592		
1,100.0	1,100.0	1,087.4	1,087.0	2.3	1.3	-153.70	-234.8	-116.0	262.2	258.6	3.62	72.480		
1,200.0	1,200.0	1,191.1	1,190.6	2.6	1.5	-153.92	-239.2	-117.1	266.4	262.4	4.04	65.959		
1,300.0	1,300.0	1,295.6	1,295.0	2.8	1.7	-154.02	-241.9	-117.9	269.1	264.6	4.48	60.056		
1,400.0	1,400.0	1,397.5	1,396.9	3.0	1.9	-153.97	-243.0	-118.7	270.4	265.5	4.92	55.005		
1,500.0	1,500.0	1,496.5	1,495.9	3.2	2.1	-153.87	-243.9	-119.6	271.7	266.4	5.33	50.930		
1,600.0	1,600.0	1,594.6	1,594.0	3.5	2.3	-153.73	-245.2	-121.0	273.5	267.8	5.75	47.594		
1,700.0	1,700.0	1,691.4	1,690.7	3.7	2.5	-153.42	-246.9	-123.5	276.3	270.1	6.16	44.850		
1,800.0	1,800.0	1,796.5	1,795.8	3.9	2.7	-153.10	-248.7	-126.2	278.9	272.3	6.61	42.201		
1,900.0	1,900.0	1,900.7	1,899.9	4.1	2.9	-153.02	-249.1	-126.8	279.5	272.5	7.06	39.586		
2,000.0	2,000.0	2,000.6	1,999.9	4.4	3.2	-153.03	-249.2	-126.8	279.6	272.1	7.50	37.283		
2,100.0	2,100.0	2,100.7	2,100.0	4.6	3.4	-153.05	-249.2	-126.7	279.6	271.7	7.93	35.251		
2,200.0	2,200.0	2,200.7	2,200.0	4.8	3.6	-153.05	-249.2	-126.7	279.6	271.2	8.37	33.403		
2,300.0	2,300.0	2,300.8	2,300.0	5.0	3.8	-153.05	-249.2	-126.7	279.6	270.8	8.80	31.763		
2,400.0	2,400.0	2,401.1	2,400.4	5.3	4.0	-153.04	-249.1	-126.7	279.5	270.3	9.23	30.265		
2,500.0	2,500.0	2,500.8	2,500.1	5.5	4.2	-153.03	-249.0	-126.7	279.4	269.8	9.67	28.902		
2,600.0	2,600.0	2,601.0	2,600.3	5.7	4.4	-153.02	-248.9	-126.7	279.3	269.2	10.10	27.643		
2,700.0	2,700.0	2,700.7	2,700.0	5.9	4.6	-153.02	-248.9	-126.7	279.3	268.7	10.54	26.488		
2,800.0	2,800.0	2,800.7	2,800.0	6.2	4.8	-153.02	-248.9	-126.7	279.3	268.3	10.98	25.445		
2,900.0	2,900.0	2,900.7	2,900.0	6.4	5.0	-153.02	-248.9	-126.7	279.3	267.9	11.41	24.484		
3,000.0	3,000.0	3,000.7	3,000.0	6.6	5.2	-153.02	-248.9	-126.7	279.3	267.5	11.84	23.593		
3,100.0	3,100.0	3,100.7	3,100.0	6.8	5.5	-153.02	-248.9	-126.7	279.3	267.0	12.27	22.755		
3,200.0	3,200.0	3,200.7	3,200.0	7.1	5.7	-153.02	-248.9	-126.7	279.3	266.6	12.71	21.973		
3,300.0	3,300.0	3,300.7	3,300.0	7.3	5.9	-153.02	-248.9	-126.7	279.3	266.1	13.14	21.254		
3,400.0	3,400.0	3,400.7	3,400.0	7.5	6.1	-153.02	-248.9	-126.7	279.3	265.7	13.57	20.583		
3,500.0	3,500.0	3,500.7	3,500.0	7.7	6.3	-153.02	-248.9	-126.7	279.3	265.3	14.00	19.947		
3,600.0	3,600.0	3,600.7	3,600.0	7.9	6.5	-52.59	-248.9	-126.7	278.2	263.8	14.43	19.286		
3,700.0	3,699.8	3,700.6	3,699.8	8.1	6.7	-53.51	-248.9	-126.7	275.1	260.2	14.83	18.553		
3,800.0	3,799.5	3,800.6	3,799.9	8.3	6.9	-55.08	-248.8	-126.7	269.9	254.7	15.23	17.717		
3,900.0	3,898.7	3,899.4	3,898.7	8.6	7.1	-57.34	-248.7	-126.7	263.0	247.4	15.65	16.810		
4,000.0	3,997.5	3,998.2	3,997.5	8.8	7.3	-60.42	-248.7	-126.7	254.8	238.8	16.06	15.865		
4,100.0	4,095.6	4,096.3	4,095.6	9.0	7.5	-64.39	-248.7	-126.7	245.9	229.4	16.51	14.896		
4,200.0	4,193.1	4,193.8	4,193.1	9.3	7.7	-69.37	-248.7	-126.7	236.8	219.9	16.99	13.943		
4,300.0	4,289.6	4,290.5	4,289.8	9.6	7.9	-75.40	-248.7	-126.8	228.7	211.2	17.51	13.062		
4,406.0	4,391.0	4,391.7	4,391.0	10.0	8.2	-82.92	-248.6	-126.8	222.5	204.4	18.11	12.291		
4,499.1	4,479.5	4,480.3	4,479.5	10.3	8.3	-90.04	-248.6	-126.8	220.7	202.0	18.66	11.827 CC		
4,500.0	4,480.3	4,481.1	4,480.4	10.3	8.3	-90.11	-248.6	-126.8	220.7	202.0	18.66	11.824 ES		
4,600.0	4,575.4	4,576.4	4,575.7	10.7	8.5	-97.75	-248.5	-126.9	222.8	203.6	19.25	11.572		
4,700.0	4,670.4	4,671.1	4,670.4	11.2	8.7	-105.09	-248.5	-126.9	229.2	209.4	19.82	11.568 SF		
4,800.0	4,765.4	4,766.2	4,765.4	11.6	8.9	-111.98	-248.5	-126.9	239.6	219.2	20.34	11.776		
4,900.0	4,860.5	4,861.2	4,860.5	12.1	9.1	-118.26	-248.5	-126.9	253.4	232.5	20.84	12.156		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 7-17H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 1031-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,955.5	4,956.2	4,955.5	12.6	9.3	-123.89	-248.5	-126.9	270.0	248.7	21.31	12.671		
5,100.0	5,050.6	5,051.3	5,050.6	13.1	9.5	-128.86	-248.5	-126.9	289.1	267.3	21.76	13.289		
5,200.0	5,145.6	5,146.3	5,145.6	13.7	9.7	-133.22	-248.5	-126.9	310.1	287.9	22.18	13.980		
5,300.0	5,240.6	5,241.4	5,240.6	14.2	9.9	-137.04	-248.5	-126.9	332.7	310.1	22.60	14.720		
5,400.0	5,335.7	5,336.4	5,335.7	14.7	10.2	-140.38	-248.5	-126.9	356.6	333.6	23.02	15.491		
5,500.0	5,430.7	5,431.5	5,430.8	15.3	10.4	-143.31	-248.5	-127.0	381.5	358.1	23.44	16.278		
5,600.0	5,525.8	5,526.9	5,526.1	15.9	10.6	-145.90	-248.4	-127.0	407.2	383.4	23.86	17.070		
5,700.0	5,620.8	5,621.5	5,620.7	16.4	10.8	-148.18	-248.2	-127.0	433.7	409.4	24.27	17.867		
5,800.0	5,715.8	5,716.1	5,715.4	17.0	11.0	-150.21	-248.1	-126.9	460.8	436.1	24.69	18.663		
5,900.0	5,810.9	5,811.4	5,810.7	17.6	11.2	-152.02	-248.0	-126.7	488.4	463.3	25.11	19.454		
6,000.0	5,905.9	5,907.3	5,906.6	18.2	11.3	-153.65	-247.9	-126.8	516.3	490.8	25.53	20.223		
6,100.0	6,001.0	6,002.0	6,001.2	18.8	11.5	-155.10	-247.8	-126.8	544.5	518.6	25.96	20.973		
6,200.0	6,096.0	6,096.7	6,096.0	19.4	11.7	-156.41	-247.6	-126.8	573.1	546.7	26.40	21.710		
6,300.0	6,191.0	6,191.8	6,191.1	20.0	11.9	-157.60	-247.5	-126.8	602.0	575.1	26.83	22.433		
6,400.0	6,286.1	6,287.2	6,286.4	20.6	12.1	-158.69	-247.3	-126.8	631.0	603.7	27.28	23.132		
6,500.0	6,381.1	6,382.2	6,381.5	21.2	12.3	-159.66	-247.3	-126.9	660.2	632.5	27.73	23.812		
6,541.3	6,420.4	6,421.9	6,421.2	21.5	12.4	-160.05	-247.3	-126.9	672.3	644.4	27.91	24.086		
6,550.0	6,428.7	6,430.2	6,429.5	21.5	12.4	-162.92	-247.3	-126.9	674.8	646.9	27.93	24.164		
6,600.0	6,476.4	6,478.4	6,477.7	21.8	12.5	-179.60	-247.3	-127.0	689.5	661.4	28.03	24.601		
6,650.0	6,524.2	6,527.6	6,526.9	22.0	12.7	-162.26	-247.2	-127.1	703.8	675.7	28.16	24.996		
6,700.0	6,571.6	6,577.1	6,576.4	22.2	12.8	-147.37	-246.9	-127.3	717.9	689.6	28.32	25.352		
6,750.0	6,618.4	6,628.2	6,627.5	22.4	12.9	-135.89	-246.4	-127.7	731.6	703.1	28.50	25.672		
6,800.0	6,664.1	6,687.0	6,686.3	22.6	13.0	-127.77	-245.9	-128.9	744.6	715.9	28.71	25.934		
6,850.0	6,708.4	6,720.0	6,719.2	22.7	13.1	-121.25	-244.6	-129.1	757.8	728.9	28.84	26.272		
6,900.0	6,751.0	6,740.0	6,739.1	22.9	13.1	-115.79	-242.6	-128.4	772.0	743.1	28.94	26.681		
6,950.0	6,791.5	6,770.6	6,769.3	23.0	13.2	-111.69	-238.2	-126.6	787.2	758.1	29.07	27.076		
7,000.0	6,829.7	6,801.4	6,799.4	23.1	13.2	-108.35	-232.5	-124.0	803.0	773.8	29.22	27.481		
7,050.0	6,865.2	6,841.5	6,838.2	23.2	13.3	-105.93	-223.2	-119.5	819.4	790.0	29.41	27.861		
7,100.0	6,897.8	6,921.8	6,912.1	23.3	13.5	-105.06	-194.0	-109.2	834.7	805.0	29.70	28.100		
7,150.0	6,927.2	6,985.0	6,965.2	23.4	13.7	-103.76	-160.9	-100.0	848.3	818.3	30.00	28.278		
7,189.8	6,948.2	7,039.8	7,006.8	23.4	13.8	-102.90	-126.6	-90.8	858.5	828.2	30.29	28.345		
7,200.0	6,953.3	7,056.6	7,018.7	23.4	13.9	-103.16	-115.1	-87.8	860.9	830.5	30.37	28.345		
7,300.0	7,003.3	7,202.1	7,099.7	23.6	14.6	-103.50	1.9	-60.8	880.7	849.3	31.40	28.044		
7,339.8	7,023.2	7,232.9	7,111.1	23.7	14.8	-103.14	29.7	-54.2	887.9	856.2	31.79	27.936		
7,350.0	7,028.3	7,240.2	7,113.4	23.7	14.9	-102.82	36.4	-52.5	889.9	858.0	31.89	27.901		
7,400.0	7,050.6	7,291.0	7,125.9	23.9	15.2	-100.89	83.9	-39.9	900.2	867.6	32.61	27.604		
7,450.0	7,068.9	7,350.2	7,133.6	24.1	15.8	-98.71	140.7	-25.0	910.7	877.2	33.51	27.176		
7,500.0	7,083.0	7,388.0	7,135.4	24.3	16.1	-96.89	177.1	-15.4	921.7	887.4	34.29	26.880		
7,550.0	7,093.0	7,415.1	7,136.1	24.6	16.3	-95.24	203.2	-7.9	934.1	899.1	35.02	26.675		
7,600.0	7,098.7	7,440.0	7,136.0	24.8	16.6	-93.58	227.0	-0.5	947.9	912.1	35.74	26.519		
7,640.0	7,100.0	7,464.0	7,135.4	25.1	16.8	-92.22	249.7	7.3	959.9	923.5	36.37	26.396		
7,700.0	7,100.0	7,500.3	7,134.0	25.5	17.2	-92.10	283.8	19.7	979.0	941.7	37.37	26.197		
7,800.0	7,100.0	7,602.8	7,130.7	26.4	18.3	-91.83	380.2	54.0	1,010.5	971.0	39.55	25.550		
7,900.0	7,100.0	7,703.7	7,129.7	27.3	19.5	-91.71	475.3	88.1	1,042.4	1,000.4	41.92	24.868		
8,000.0	7,100.0	7,805.1	7,127.6	28.4	20.7	-91.55	571.0	121.6	1,073.4	1,029.0	44.40	24.174		
8,100.0	7,100.0	7,899.9	7,126.4	29.6	21.9	-91.44	660.7	152.4	1,103.9	1,056.9	46.99	23.492		
8,200.0	7,100.0	7,999.1	7,125.3	30.8	23.3	-91.34	754.4	184.5	1,134.3	1,084.5	49.76	22.796		
8,300.0	7,100.0	8,107.0	7,122.2	32.2	24.8	-91.14	856.7	218.5	1,163.9	1,111.1	52.77	22.057		
8,400.0	7,100.0	8,195.5	7,120.4	33.6	26.1	-91.03	940.7	246.3	1,193.3	1,137.8	55.57	21.475		
8,500.0	7,100.0	8,286.1	7,119.6	35.0	27.5	-90.96	1,026.6	275.5	1,223.6	1,165.1	58.48	20.922		
8,600.0	7,100.0	8,381.4	7,118.9	36.5	29.0	-90.90	1,116.8	306.2	1,253.8	1,192.2	61.54	20.372		
8,700.0	7,100.0	8,484.8	7,115.2	38.1	30.7	-90.71	1,214.5	339.7	1,284.4	1,219.6	64.79	19.823		

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Offset Design T7N-R80W-S17 - Mutual 7-17H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 1031-Sperry MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,800.0	7,100.0	8,600.3	7,107.2	39.7	32.5	90.33	1,324.2	374.9	1,312.8	1,244.6	68.22	19.245		
8,900.0	7,100.0	8,691.0	7,101.9	41.3	33.9	90.08	1,410.5	402.4	1,341.2	1,269.9	71.31	18.809		
9,000.0	7,100.0	8,776.3	7,098.8	42.9	35.3	89.94	1,491.6	428.4	1,369.8	1,295.5	74.35	18.423		
9,100.0	7,100.0	8,861.4	7,095.7	44.6	36.7	89.81	1,572.2	455.6	1,399.9	1,322.4	77.44	18.077		
9,200.0	7,100.0	8,946.8	7,093.3	46.3	39.1	89.72	1,710.4	500.7	1,429.3	1,347.8	81.49	17.541		
9,300.0	7,100.0	9,032.2	7,091.7	48.0	40.6	89.78	1,800.0	527.0	1,455.5	1,370.8	84.75	17.174		
9,400.0	7,100.0	9,117.7	7,089.6	49.7	41.9	89.82	1,873.4	550.2	1,483.6	1,395.8	87.79	16.900		
9,500.0	7,100.0	9,203.0	7,087.5	51.4	43.1	89.82	1,937.9	571.2	1,512.6	1,421.9	90.69	16.679		
9,600.0	7,100.0	9,288.3	7,085.4	53.2	44.7	89.76	2,030.7	602.8	1,542.9	1,448.8	94.09	16.399		
9,700.0	7,100.0	9,373.6	7,083.3	54.9	46.3	89.70	2,119.4	632.0	1,572.3	1,474.9	97.43	16.139		
9,800.0	7,100.0	9,458.9	7,081.2	56.7	47.9	89.59	2,206.2	661.2	1,602.3	1,501.6	100.75	15.905		
9,900.0	7,100.0	9,544.2	7,079.1	58.5	49.4	89.50	2,289.2	689.3	1,632.5	1,528.5	104.01	15.696		
10,000.0	7,100.0	9,629.5	7,077.0	60.2	50.8	89.45	2,367.8	716.8	1,663.5	1,556.3	107.20	15.518		
10,100.0	7,100.0	9,714.8	7,074.9	62.0	52.3	89.40	2,446.4	744.4	1,694.8	1,584.4	110.41	15.350		
10,200.0	7,100.0	9,799.9	7,072.8	63.8	54.0	89.32	2,538.0	777.4	1,726.8	1,613.0	113.86	15.166		
10,300.0	7,100.0	9,885.2	7,070.7	65.7	55.5	89.26	2,619.5	806.9	1,758.9	1,641.8	117.13	15.017		
10,400.0	7,100.0	9,970.5	7,068.6	67.5	57.5	89.19	2,729.9	846.6	1,791.0	1,670.1	120.89	14.815		
10,500.0	7,100.0	10,055.8	7,066.5	69.3	58.7	89.13	2,794.1	869.4	1,822.6	1,698.7	123.87	14.714		
10,600.0	7,100.0	10,141.1	7,064.4	71.1	60.8	89.05	2,911.9	911.7	1,854.6	1,726.9	127.79	14.514		
10,700.0	7,100.0	10,226.4	7,062.3	73.0	62.7	89.00	3,013.3	946.6	1,885.2	1,753.8	131.42	14.344		
10,800.0	7,100.0	10,311.7	7,060.2	74.8	64.3	89.04	3,100.0	976.0	1,915.4	1,780.6	134.83	14.206		
10,900.0	7,100.0	10,397.0	7,058.1	76.6	66.3	89.15	3,205.9	1,011.8	1,945.4	1,806.9	138.58	14.038		
11,000.0	7,100.0	10,482.3	7,056.0	78.5	68.1	89.26	3,306.9	1,045.6	1,975.3	1,833.0	142.24	13.887		
11,100.0	7,100.0	10,567.6	7,053.9	80.3	69.6	89.33	3,387.8	1,072.2	2,004.6	1,859.0	145.56	13.772		
11,200.0	7,100.0	10,652.9	7,051.8	82.2	71.0	89.41	3,462.3	1,097.3	2,034.6	1,885.8	148.77	13.676		
11,300.0	7,100.0	10,738.2	7,049.7	84.0	72.4	89.46	3,535.9	1,122.9	2,065.4	1,913.5	151.96	13.592		
11,400.0	7,100.0	10,823.5	7,047.6	85.9	75.2	89.52	3,685.5	1,173.6	2,095.9	1,939.4	156.48	13.394		
11,500.0	7,100.0	10,908.8	7,045.5	87.7	76.7	89.57	3,765.9	1,199.3	2,124.4	1,964.6	159.79	13.295		
11,600.0	7,100.0	10,994.1	7,043.4	89.6	78.1	89.64	3,844.3	1,224.9	2,153.4	1,990.4	163.06	13.206		
11,700.0	7,100.0	11,079.4	7,041.3	91.5	79.9	89.77	3,942.9	1,257.3	2,182.7	2,016.0	166.71	13.093		
11,800.0	7,100.0	11,164.7	7,039.2	93.3	81.3	89.92	4,017.8	1,281.9	2,212.0	2,042.1	169.94	13.016		
11,900.0	7,100.0	11,250.0	7,037.1	95.2	82.8	90.10	4,098.4	1,308.7	2,241.6	2,068.4	173.28	12.937		
12,000.0	7,100.0	11,335.3	7,035.0	97.1	84.4	90.29	4,183.2	1,337.2	2,271.7	2,095.0	176.67	12.859		
12,100.0	7,100.0	11,420.6	7,032.9	99.0	86.4	90.53	4,291.9	1,373.6	2,301.5	2,121.0	180.49	12.751		
12,117.8	7,100.0	11,444.3	7,031.0	99.3	86.6	90.55	4,301.7	1,376.8	2,306.8	2,125.8	180.94	12.749		

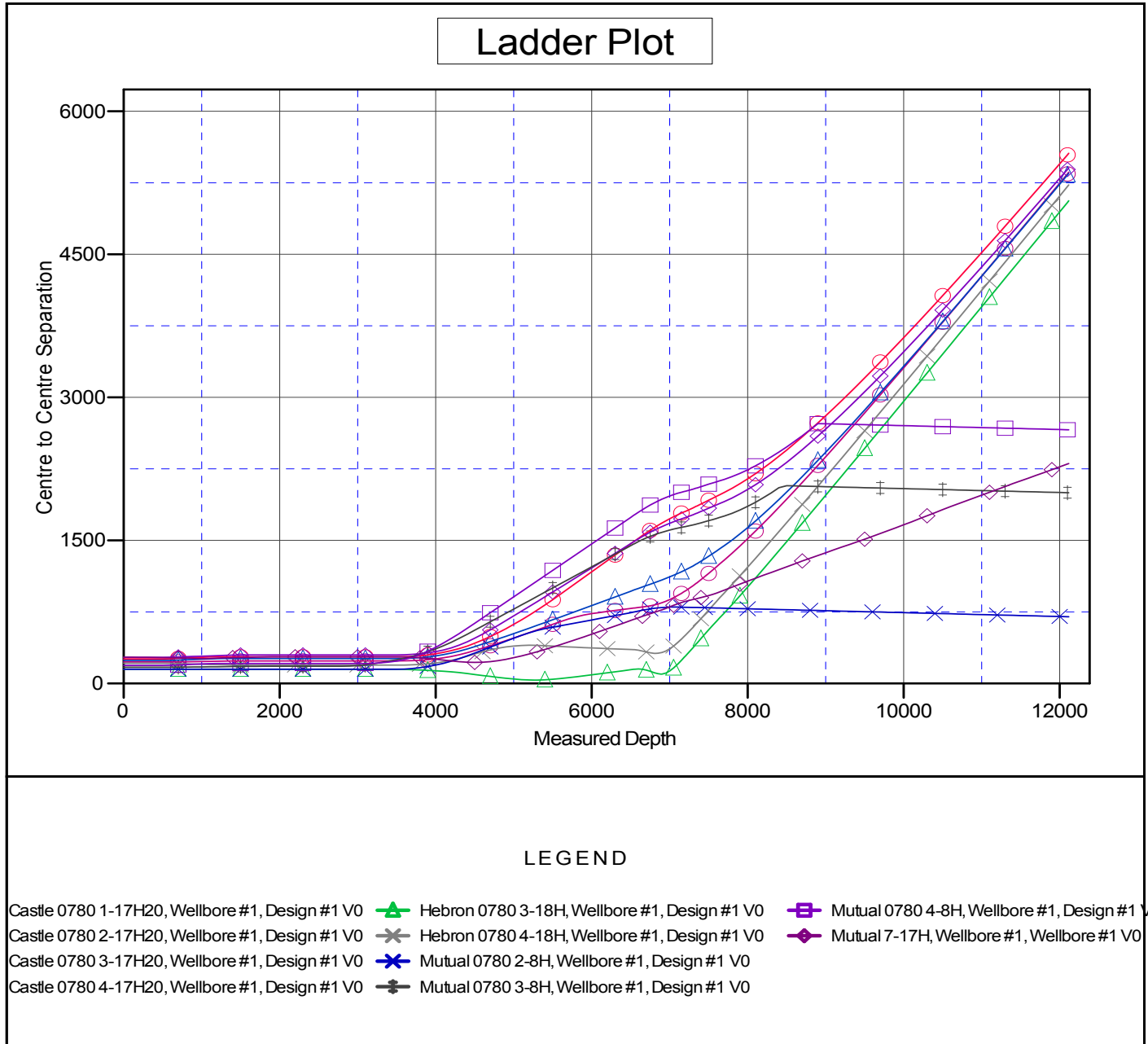
SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 4-7H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 8175.0usft (Original Well Ele)
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Hebron 0780 4-7H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.58°



SandRidge Energy

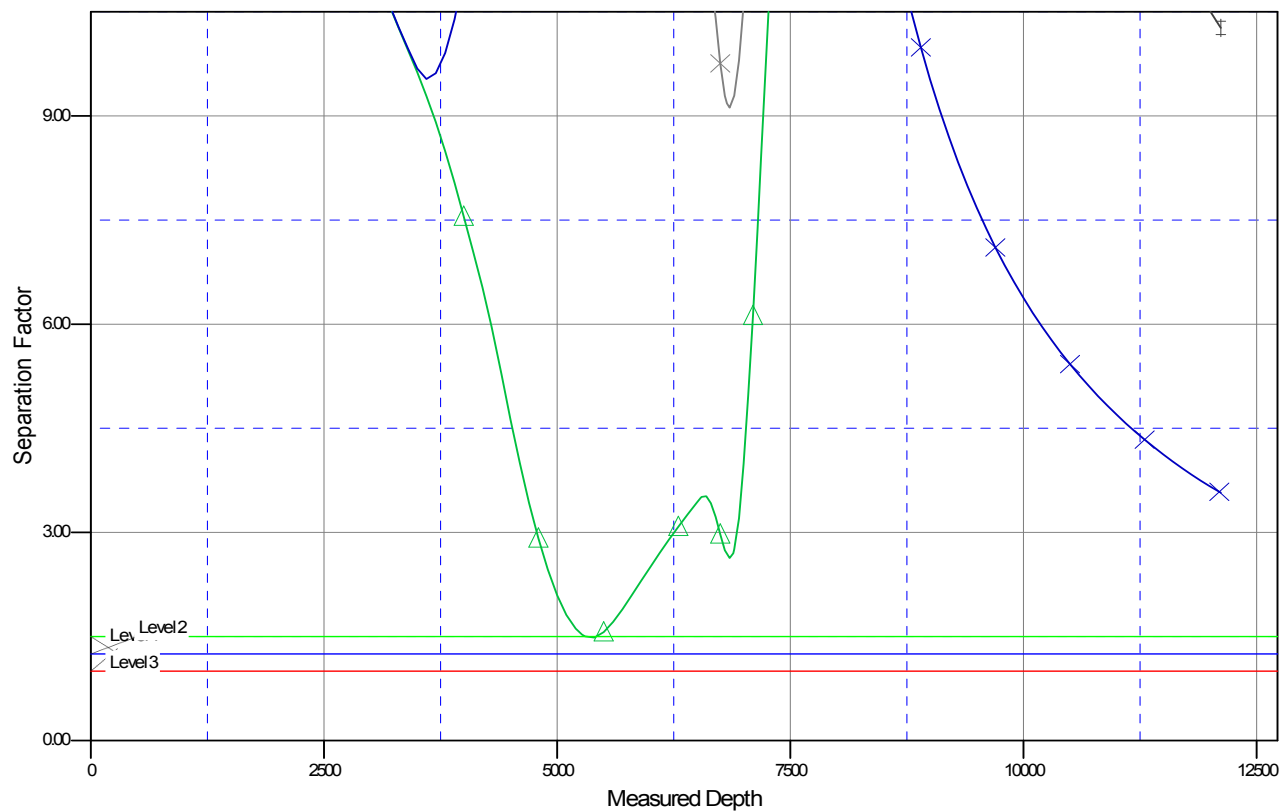
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Separation Factor Plot



LEGEND

- Castle 0780 1-17H20, Wellbore #1, Design #1 V0
 —▲— Hebron 0780 3-18H, Wellbore #1, Design #1 V0
 —x— Mutual 0780 4-8H, Wellbore #1, Design #1 V0
- Castle 0780 2-17H20, Wellbore #1, Design #1 V0
 —x— Hebron 0780 4-18H, Wellbore #1, Design #1 V0
 —x— Mutual 0780 2-8H, Wellbore #1, Design #1 V0
- Castle 0780 3-17H20, Wellbore #1, Design #1 V0
 —x— Mutual 0780 3-8H, Wellbore #1, Design #1 V0
 —x— Mutual 7-17H, Wellbore #1, Wellbore #1 V0
- Castle 0780 4-17H20, Wellbore #1, Design #1 V0
 —x— Mutual 0780 3-8H, Wellbore #1, Design #1 V0
 —x— Mutual 7-17H, Wellbore #1, Wellbore #1 V0