

SandRidge Energy

North Park Basin

T7N-R80W-S7

Hebron 0780 2-18H

Wellbore #1

Design #1

Anticollision Report

09 December, 2015

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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 us	Error Surface:		Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:		Not applied

Survey Tool Program		Date	12/9/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,819.9	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-S7						
Hebron 01-18H - Wellbore #1 - Wellbore #1	2,410.8	2,410.3	79.0	73.7	14.951	CC
Hebron 01-18H - Wellbore #1 - Wellbore #1	2,500.0	2,499.3	79.1	73.7	14.427	ES
Hebron 01-18H - Wellbore #1 - Wellbore #1	3,100.0	3,098.9	81.9	75.1	11.991	SF
Hebron 1-18HR - Wellbore #1 - Hebron 1-18HR	4,318.0	4,296.3	27.6	8.5	1.446	Level 3, CC, ES, SF
Hebron 5-18H - Wellbore #1 - Wellbore #1	4,382.6	4,361.3	76.5	57.7	4.072	CC
Hebron 5-18H - Wellbore #1 - Wellbore #1	4,400.0	4,378.5	76.6	57.7	4.058	ES, SF

Offset Design T7N-R80W-S7 - Hebron 01-18H - Wellbore #1 - Wellbore #1												Offset Site Error: 0.0 usft	
Survey Program: 50-Gyro												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	113.41	-40.3	93.0	101.4				
100.0	100.0	98.4	98.4	0.1	0.0	113.69	-40.6	92.5	101.0	100.9	0.09	1,107.452	
136.5	136.5	134.5	134.5	0.2	0.0	113.89	-40.9	92.3	101.0	100.8	0.17	582.332	
200.0	200.0	197.6	197.6	0.3	0.0	114.36	-41.7	92.1	101.1	100.8	0.32	319.993	
300.0	300.0	296.7	296.7	0.5	0.0	115.35	-43.7	92.3	102.1	101.6	0.54	188.800	
400.0	400.0	396.9	396.9	0.8	0.0	116.35	-45.9	92.7	103.4	102.6	0.77	135.083	
500.0	500.0	497.0	496.9	1.0	0.0	117.45	-48.2	92.7	104.5	103.5	0.99	105.489	
600.0	600.0	597.3	597.1	1.2	0.0	118.64	-50.6	92.6	105.5	104.3	1.22	86.806	
700.0	700.0	698.6	698.4	1.4	0.0	119.98	-52.8	91.5	105.7	104.2	1.44	73.387	
800.0	800.0	799.5	799.4	1.7	0.0	121.35	-54.5	89.5	104.8	103.1	1.66	62.954	
900.0	900.0	899.4	899.2	1.9	0.0	122.75	-56.0	87.1	103.6	101.7	1.89	54.811	
1,000.0	1,000.0	999.3	999.0	2.1	0.0	124.34	-57.8	84.6	102.5	100.4	2.11	48.489	
1,100.0	1,100.0	1,099.1	1,098.8	2.3	0.0	125.85	-59.5	82.3	101.6	99.2	2.34	43.421	
1,200.0	1,200.0	1,199.8	1,199.5	2.6	0.0	127.53	-61.2	79.7	100.5	97.9	2.56	39.207	
1,300.0	1,300.0	1,299.6	1,299.2	2.8	0.0	128.91	-62.3	77.1	99.1	96.3	2.79	35.547	
1,400.0	1,400.0	1,401.2	1,400.8	3.0	0.0	129.69	-62.1	74.9	97.3	94.3	3.01	32.301	
1,500.0	1,500.0	1,502.9	1,502.4	3.2	0.0	128.94	-58.6	72.6	93.4	90.1	3.24	28.841	
1,600.0	1,600.0	1,602.8	1,602.1	3.5	0.0	125.75	-51.7	71.8	88.6	85.1	3.46	25.573	
1,700.0	1,700.0	1,700.9	1,699.8	3.7	0.0	120.85	-43.6	73.0	85.1	81.4	3.69	23.080	
1,800.0	1,800.0	1,800.3	1,798.9	3.9	0.0	116.07	-36.8	75.2	83.8	79.9	3.91	21.411	
1,900.0	1,900.0	1,901.1	1,899.6	4.1	0.0	112.92	-32.0	75.8	82.3	78.2	4.14	19.894	

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

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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-S7 - Hebron 01-18H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 50-Gyro													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		
2,000.0	2,000.0	2,000.9	1,999.4	4.4	0.0	111.69	-29.6	74.3	80.0	75.7	4.36	18.346		
2,100.0	2,100.0	2,099.7	2,098.2	4.6	0.0	111.40	-28.9	73.8	79.3	74.7	4.59	17.293		
2,200.0	2,200.0	2,199.6	2,198.0	4.8	0.0	111.24	-28.7	73.8	79.2	74.4	4.81	16.455		
2,221.1	2,221.1	2,220.6	2,219.1	4.9	0.0	111.25	-28.7	73.8	79.2	74.3	4.86	16.293		
2,300.0	2,300.0	2,299.6	2,298.1	5.0	0.0	111.37	-28.8	73.7	79.2	74.1	5.04	15.720		
2,400.0	2,400.0	2,399.6	2,398.0	5.3	0.0	111.30	-28.7	73.6	79.0	73.8	5.26	15.020		
2,410.8	2,410.8	2,410.3	2,408.8	5.3	0.0	111.30	-28.7	73.6	79.0	73.7	5.29	14.951 CC		
2,500.0	2,500.0	2,499.3	2,497.8	5.5	0.0	111.47	-29.0	73.6	79.1	73.7	5.49	14.427 ES		
2,600.0	2,600.0	2,599.3	2,597.8	5.7	0.0	111.51	-29.1	73.9	79.4	73.7	5.71	13.913		
2,700.0	2,700.0	2,699.4	2,697.9	5.9	0.0	111.36	-29.0	74.2	79.7	73.8	5.94	13.427		
2,800.0	2,800.0	2,799.2	2,797.7	6.2	0.0	110.61	-28.1	74.8	79.9	73.7	6.16	12.966		
2,900.0	2,900.0	2,899.4	2,897.8	6.4	0.0	108.19	-25.0	76.2	80.2	73.8	6.38	12.564		
3,000.0	3,000.0	2,999.0	2,997.2	6.6	0.0	104.09	-19.6	78.3	80.7	74.1	6.61	12.211		
3,100.0	3,100.0	3,098.9	3,096.7	6.8	0.0	98.16	-11.6	81.1	81.9	75.1	6.83	11.991 SF		
3,200.0	3,200.0	3,196.0	3,193.1	7.1	0.0	90.26	-0.4	85.2	85.3	78.3	7.06	12.087		
3,300.0	3,300.0	3,294.3	3,290.1	7.3	0.0	81.11	14.2	91.0	92.5	85.2	7.28	12.697		
3,400.0	3,400.0	3,390.5	3,384.7	7.5	0.0	72.74	30.4	97.7	103.1	95.6	7.51	13.737		
3,500.0	3,500.0	3,488.3	3,480.6	7.7	0.0	65.38	48.2	105.3	117.1	109.4	7.73	15.142		
3,600.0	3,600.0	3,587.5	3,577.9	8.0	0.0	59.71	65.9	112.8	132.2	124.2	7.96	16.609		
3,700.0	3,700.0	3,687.1	3,675.9	8.2	0.0	55.66	82.2	120.3	147.4	139.2	8.18	18.010		
3,800.0	3,800.0	3,789.2	3,776.7	8.4	0.0	52.63	97.1	127.2	161.4	153.0	8.41	19.201		
3,900.0	3,900.0	3,890.8	3,877.1	8.6	0.0	50.03	111.0	132.4	174.0	165.4	8.63	20.155		
4,000.0	4,000.0	3,991.4	3,976.8	8.9	0.0	47.41	124.8	135.8	185.6	176.7	8.86	20.956		
4,100.0	4,100.0	4,091.3	4,075.6	9.1	0.0	-26.95	139.0	137.9	195.5	186.5	9.07	21.560		
4,200.0	4,199.8	4,191.5	4,174.8	9.3	0.0	-29.97	152.9	139.6	202.3	193.0	9.27	21.824		
4,300.0	4,299.5	4,290.3	4,272.7	9.5	0.0	-33.36	166.7	141.0	206.6	197.1	9.47	21.817		
4,400.0	4,398.7	4,388.3	4,369.7	9.7	0.0	-36.88	180.0	143.3	209.0	199.3	9.67	21.616		
4,500.0	4,497.5	4,486.6	4,467.1	9.9	0.0	-40.41	192.8	147.6	210.2	200.3	9.88	21.279		
4,600.0	4,595.6	4,586.0	4,565.6	10.2	0.0	-44.11	204.8	153.5	209.5	199.4	10.10	20.742		
4,700.0	4,693.1	4,686.0	4,664.7	10.5	0.0	-48.61	216.6	159.2	207.0	196.6	10.35	20.008		
4,800.0	4,789.6	4,784.3	4,762.3	10.8	0.0	-54.32	228.3	163.1	203.3	192.7	10.63	19.119		
4,900.0	4,885.3	4,880.9	4,858.1	11.1	0.0	-61.33	240.2	165.5	200.1	189.2	10.98	18.228		
4,999.2	4,979.1	4,977.3	4,953.7	11.5	0.0	-68.93	251.8	169.0	198.7	187.3	11.39	17.454		
5,016.9	4,995.7	4,994.5	4,970.8	11.5	0.0	-70.33	253.8	169.8	198.7	187.2	11.47	17.325		
5,100.0	5,073.8	5,076.0	5,051.7	11.9	0.0	-76.83	262.8	173.8	199.7	187.9	11.85	16.852		
5,200.0	5,167.8	5,170.8	5,145.8	12.3	0.0	-84.39	272.9	177.9	204.1	191.8	12.32	16.567		
5,300.0	5,261.8	5,264.6	5,239.1	12.8	0.0	-91.99	283.2	179.6	213.4	200.6	12.78	16.702		
5,400.0	5,355.7	5,356.5	5,330.4	13.3	0.0	-99.12	293.3	179.6	227.4	214.2	13.21	17.221		
5,500.0	5,449.7	5,448.5	5,421.7	13.8	0.0	-105.34	304.6	179.2	246.2	232.6	13.61	18.097		
5,600.0	5,543.7	5,544.7	5,517.1	14.3	0.0	-110.91	316.8	178.6	268.1	254.1	13.97	19.185		
5,700.0	5,637.7	5,641.4	5,613.1	14.9	0.0	-115.60	328.5	179.1	290.9	276.6	14.32	20.311		
5,800.0	5,731.6	5,738.0	5,709.0	15.4	0.0	-119.55	340.1	180.0	315.0	300.3	14.66	21.480		
5,900.0	5,825.6	5,834.7	5,805.0	16.0	0.0	-122.95	351.4	181.4	339.7	324.7	15.00	22.648		
6,000.0	5,919.6	5,931.4	5,901.1	16.6	0.0	-125.81	362.8	183.5	364.9	349.5	15.33	23.804		
6,100.0	6,013.6	6,027.6	5,996.5	17.2	0.0	-128.28	374.1	185.8	390.5	374.8	15.66	24.935		
6,200.0	6,107.6	6,124.4	6,092.6	17.8	0.0	-130.41	385.6	188.5	416.5	400.5	15.99	26.043		
6,300.0	6,201.5	6,223.1	6,190.5	18.4	0.0	-132.18	398.0	192.3	442.5	426.1	16.33	27.087		
6,345.1	6,243.9	6,266.1	6,233.1	18.6	0.0	-132.87	403.5	194.2	454.1	437.6	16.49	27.532		
6,350.0	6,248.5	6,270.6	6,237.5	18.7	0.0	-134.49	404.1	194.4	455.4	438.9	16.49	27.609		
6,375.0	6,272.2	6,292.5	6,259.2	18.8	0.0	-143.33	407.0	195.3	462.1	445.6	16.49	28.033		
6,400.0	6,296.0	6,314.2	6,280.7	18.9	0.0	-153.13	409.8	196.1	469.3	452.9	16.47	28.498		
6,425.0	6,319.9	6,337.0	6,303.3	19.0	0.0	-163.60	412.9	196.8	476.9	460.5	16.45	28.996		

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Survey Program: 50-Gyro												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	
6,450.0	6,343.8	6,359.1	6,325.2	19.1	0.0	-174.22	416.0	197.6	484.8	468.4	16.42	29.523	
6,475.0	6,367.7	6,381.7	6,347.5	19.2	0.0	175.59	419.2	198.3	493.0	476.6	16.39	30.079	
6,500.0	6,391.5	6,405.0	6,370.6	19.3	0.0	166.35	422.5	199.0	501.5	485.2	16.36	30.656	
6,525.0	6,415.1	6,427.4	6,392.7	19.4	0.0	158.26	425.8	199.8	510.3	493.9	16.32	31.262	
6,550.0	6,438.5	6,449.7	6,414.8	19.5	0.0	151.38	429.1	200.6	519.3	503.0	16.28	31.897	
6,575.0	6,461.6	6,474.6	6,439.3	19.5	0.0	145.75	433.0	201.6	528.6	512.4	16.24	32.543	
6,600.0	6,484.3	6,507.4	6,471.5	19.6	0.0	141.65	439.2	204.1	538.0	521.8	16.24	33.138	
6,625.0	6,506.6	6,540.6	6,503.4	19.6	0.0	138.67	446.9	208.5	547.3	531.0	16.23	33.713	
6,645.8	6,524.8	6,561.3	6,523.0	19.7	0.0	136.40	452.5	212.2	555.2	539.0	16.21	34.258	
6,700.0	6,571.7	6,595.5	6,554.6	19.7	0.0	138.92	463.2	219.3	577.1	560.8	16.29	35.421	
6,795.8	6,654.7	6,643.4	6,597.5	19.9	0.0	142.58	481.2	231.0	621.3	604.9	16.42	37.839	
6,800.0	6,658.3	6,645.3	6,599.1	19.9	0.0	142.20	482.0	231.5	623.4	607.1	16.39	38.038	
6,825.0	6,679.5	6,657.0	6,609.3	20.0	0.0	140.11	486.9	234.6	636.7	620.5	16.21	39.285	
6,850.0	6,700.1	6,664.4	6,615.7	20.0	0.0	137.75	490.2	236.6	651.0	635.0	16.01	40.672	
6,875.0	6,719.9	6,672.1	6,622.2	20.1	0.0	135.42	493.6	238.7	666.3	650.5	15.81	42.138	
6,900.0	6,738.8	6,678.7	6,627.8	20.1	0.0	132.94	496.5	240.5	682.6	667.0	15.63	43.663	
6,925.0	6,757.0	6,688.0	6,635.6	20.2	0.0	130.64	500.9	243.2	699.8	684.3	15.49	45.191	
6,950.0	6,774.2	6,688.0	6,635.6	20.2	0.0	127.20	500.9	243.2	717.8	702.4	15.37	46.704	
6,975.0	6,790.5	6,692.8	6,639.6	20.3	0.0	124.06	503.1	244.5	736.6	721.2	15.31	48.112	
7,000.0	6,805.8	6,695.9	6,642.2	20.4	0.0	120.50	504.6	245.4	755.9	740.6	15.31	49.377	
7,025.0	6,820.1	6,698.0	6,644.0	20.4	0.0	116.55	505.6	246.0	775.9	760.5	15.38	50.465	
7,050.0	6,833.3	6,699.1	6,644.9	20.5	0.0	112.19	506.1	246.3	796.3	780.8	15.50	51.371	
7,075.0	6,845.4	6,699.3	6,645.1	20.5	0.0	107.45	506.2	246.4	817.2	801.5	15.67	52.132	
7,100.0	6,856.4	6,698.6	6,644.4	20.6	0.0	102.36	505.9	246.2	838.3	822.4	15.87	52.826	
7,125.0	6,866.1	6,696.9	6,643.1	20.7	0.0	96.99	505.1	245.7	859.7	843.6	16.05	53.560	
7,150.0	6,874.7	6,694.5	6,641.0	20.8	0.0	91.45	503.9	245.0	881.2	865.0	16.18	54.448	
7,175.0	6,882.1	6,688.0	6,635.6	20.9	0.0	85.50	500.9	243.2	902.8	886.5	16.23	55.621	
7,200.0	6,888.2	6,688.0	6,635.6	20.9	0.0	80.47	500.9	243.2	924.4	908.2	16.20	57.061	
7,225.0	6,893.0	6,688.0	6,635.6	21.0	0.0	75.64	500.9	243.2	945.9	929.8	16.08	58.814	
7,250.0	6,896.6	6,679.6	6,628.5	21.2	0.0	70.37	496.9	240.8	967.2	951.4	15.84	61.058	
7,275.0	6,898.9	6,675.0	6,624.7	21.3	0.0	65.87	494.9	239.5	988.4	972.9	15.56	63.534	
7,300.0	6,899.9	6,670.0	6,620.5	21.4	0.0	61.77	492.6	238.2	1,009.4	994.1	15.24	66.253	
7,307.1	6,900.0	6,668.6	6,619.2	21.4	0.0	60.68	492.0	237.7	1,015.2	1,000.1	15.14	67.057	
7,400.0	6,900.0	6,657.0	6,609.3	22.0	0.0	59.97	486.9	234.6	1,093.1	1,077.4	15.74	69.470	
7,500.0	6,900.0	6,625.0	6,581.3	22.7	0.0	58.04	473.9	226.3	1,178.7	1,162.3	16.36	72.038	
7,600.0	6,900.0	6,625.0	6,581.3	23.7	0.0	58.04	473.9	226.3	1,265.9	1,248.5	17.32	73.096	
7,700.0	6,900.0	6,593.0	6,552.4	24.7	0.0	56.15	462.4	218.8	1,354.4	1,336.3	18.11	74.802	
7,800.0	6,900.0	6,593.0	6,552.4	25.9	0.0	56.15	462.4	218.8	1,444.0	1,424.8	19.23	75.092	
7,900.0	6,900.0	6,579.5	6,540.0	27.1	0.0	55.36	458.0	215.8	1,534.8	1,514.5	20.29	75.645	
8,000.0	6,900.0	6,562.0	6,523.7	28.5	0.0	54.34	452.7	212.3	1,626.4	1,605.1	21.34	76.212	
8,100.0	6,900.0	6,562.0	6,523.7	29.9	0.0	54.34	452.7	212.3	1,718.8	1,696.1	22.62	75.981	
8,200.0	6,900.0	6,550.8	6,513.1	31.4	0.0	53.70	449.6	210.2	1,811.8	1,788.0	23.80	76.132	
8,300.0	6,900.0	6,541.8	6,504.6	32.9	0.0	53.18	447.2	208.7	1,905.4	1,880.4	25.02	76.153	
8,400.0	6,900.0	6,530.0	6,493.3	34.4	0.0	52.49	444.3	206.9	1,999.6	1,973.3	26.21	76.281	
8,500.0	6,900.0	6,530.0	6,493.3	36.0	0.0	52.49	444.3	206.9	2,094.1	2,066.5	27.60	75.885	
8,600.0	6,900.0	6,518.1	6,481.8	37.7	0.0	51.80	441.5	205.3	2,189.1	2,160.3	28.80	76.013	
8,700.0	6,900.0	6,511.1	6,475.0	39.3	0.0	51.39	440.0	204.5	2,284.4	2,254.3	30.08	75.935	
8,800.0	6,900.0	6,498.0	6,462.3	41.0	0.0	50.62	437.3	203.2	2,380.1	2,348.9	31.25	76.157	
8,900.0	6,900.0	6,498.0	6,462.3	42.7	0.0	50.62	437.3	203.2	2,476.0	2,443.4	32.68	75.777	
9,000.0	6,900.0	6,498.0	6,462.3	44.4	0.0	50.62	437.3	203.2	2,572.3	2,538.1	34.11	75.410	
9,100.0	6,900.0	6,498.0	6,462.3	46.2	0.0	50.62	437.3	203.2	2,668.8	2,633.2	35.56	75.059	
9,200.0	6,900.0	6,482.9	6,447.5	47.9	0.0	49.74	434.5	202.1	2,765.4	2,728.7	36.66	75.442	

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 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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-S7 - Hebron 01-18H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 50-Gyro												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	
9,300.0	6,900.0	6,478.3	6,443.0	49.7	0.0	49.48	433.7	201.8	2,862.2	2,824.2	37.99	75.341	
9,400.0	6,900.0	6,466.0	6,430.9	51.5	0.0	48.76	431.6	201.2	2,959.3	2,920.2	39.12	75.639	
9,500.0	6,900.0	6,466.0	6,430.9	53.3	0.0	48.76	431.6	201.2	3,056.5	3,015.9	40.57	75.341	
9,600.0	6,900.0	6,466.0	6,430.9	55.1	0.0	48.76	431.6	201.2	3,153.9	3,111.8	42.02	75.056	
9,700.0	6,900.0	6,457.3	6,422.3	56.9	0.0	48.26	430.3	200.8	3,251.4	3,208.1	43.23	75.217	
9,800.0	6,900.0	6,448.6	6,413.6	58.7	0.0	47.77	428.9	200.5	3,349.0	3,304.5	44.42	75.395	
9,900.0	6,900.0	6,437.0	6,402.2	60.5	0.0	47.12	427.2	200.1	3,446.7	3,401.2	45.52	75.725	
10,000.0	6,900.0	6,430.9	6,396.2	62.3	0.0	46.79	426.3	199.9	3,544.5	3,497.7	46.77	75.790	
10,100.0	6,900.0	6,421.5	6,386.9	64.2	0.0	46.28	424.9	199.6	3,642.3	3,594.4	47.91	76.031	
10,200.0	6,900.0	6,412.3	6,377.8	66.0	0.0	45.79	423.6	199.3	3,740.3	3,691.3	49.04	76.272	
10,300.0	6,900.0	6,402.5	6,368.2	67.9	0.0	45.28	422.2	199.0	3,838.3	3,788.2	50.14	76.550	
10,400.0	6,900.0	6,389.6	6,355.4	69.7	0.0	44.62	420.3	198.5	3,936.4	3,885.3	51.13	76.992	
10,500.0	6,900.0	6,376.8	6,342.7	71.6	0.0	43.98	418.5	198.1	4,034.5	3,982.4	52.10	77.437	
10,600.0	6,900.0	6,373.0	6,338.9	73.4	0.0	43.80	417.9	198.0	4,132.7	4,079.4	53.37	77.437	
10,700.0	6,900.0	6,359.8	6,325.8	75.3	0.0	43.16	416.0	197.6	4,231.0	4,176.7	54.30	77.915	
10,800.0	6,900.0	6,352.2	6,318.3	77.2	0.0	42.80	415.0	197.3	4,329.3	4,273.8	55.42	78.115	
10,900.0	6,900.0	6,342.0	6,308.2	79.0	0.0	42.32	413.6	197.0	4,427.6	4,371.2	56.44	78.450	
11,000.0	6,900.0	6,342.0	6,308.2	80.9	0.0	42.32	413.6	197.0	4,526.0	4,468.2	57.81	78.288	
11,100.0	6,900.0	6,328.1	6,294.5	82.8	0.0	41.69	411.7	196.6	4,624.4	4,565.8	58.67	78.815	
11,200.0	6,900.0	6,319.7	6,286.1	84.6	0.0	41.32	410.6	196.3	4,722.9	4,663.2	59.73	79.075	
11,300.0	6,900.0	6,310.0	6,276.6	86.5	0.0	40.89	409.3	195.9	4,821.4	4,760.7	60.72	79.401	
11,400.0	6,900.0	6,302.5	6,269.2	88.4	0.0	40.57	408.3	195.7	4,920.0	4,858.2	61.79	79.622	
11,500.0	6,900.0	6,293.6	6,260.3	90.3	0.0	40.19	407.1	195.3	5,018.6	4,955.8	62.80	79.916	
11,600.0	6,900.0	6,284.8	6,251.6	92.2	0.0	39.83	405.9	195.0	5,117.2	5,053.4	63.80	80.207	
11,700.0	6,900.0	6,278.0	6,244.9	94.1	0.0	39.55	405.0	194.7	5,215.9	5,151.0	64.87	80.402	
11,800.0	6,900.0	6,269.0	6,235.9	96.0	0.0	39.19	403.9	194.3	5,314.5	5,248.7	65.85	80.704	
11,820.7	6,900.0	6,267.5	6,234.5	96.3	0.0	39.13	403.7	194.2	5,335.0	5,269.0	66.00	80.832	

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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-S7 - Hebron 1-18HR - Wellbore #1 - Hebron 1-18HR												Offset Site Error:	0.0 usft
Survey Program: 0-3Sperry MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	14.16	31.7	8.0	38.9				
100.0	100.0	79.0	79.0	0.1	0.1	14.16	31.7	8.0	32.7	32.6	0.18	182.005	
200.0	200.0	179.0	179.0	0.3	0.3	14.16	31.7	8.0	32.7	32.1	0.61	54.040	
300.0	300.0	279.0	279.0	0.5	0.5	14.16	31.7	8.0	32.7	31.7	1.06	31.020	
400.0	400.0	379.0	379.0	0.8	0.7	14.16	31.7	8.0	32.7	31.2	1.50	21.753	
500.0	500.0	479.0	479.0	1.0	1.0	14.16	31.7	8.0	32.7	30.8	1.95	16.750	
600.0	600.0	579.0	579.0	1.2	1.2	14.16	31.7	8.0	32.7	30.3	2.40	13.617	
700.0	700.0	679.0	679.0	1.4	1.4	14.16	31.7	8.0	32.7	29.9	2.85	11.472	
800.0	800.0	779.0	779.0	1.7	1.6	14.16	31.7	8.0	32.7	29.4	3.30	9.911	
900.0	900.0	879.0	879.0	1.9	1.9	14.16	31.7	8.0	32.7	29.0	3.75	8.723	
1,000.0	1,000.0	979.0	979.0	2.1	2.1	14.16	31.7	8.0	32.7	28.5	4.20	7.790	
1,100.0	1,100.0	1,079.0	1,079.0	2.3	2.3	14.16	31.7	8.0	32.7	28.1	4.65	7.037	
1,200.0	1,200.0	1,179.0	1,179.0	2.6	2.5	14.16	31.7	8.0	32.7	27.6	5.10	6.417	
1,300.0	1,300.0	1,279.0	1,279.0	2.8	2.8	14.16	31.7	8.0	32.7	27.2	5.55	5.897	
1,400.0	1,400.0	1,379.0	1,379.0	3.0	3.0	14.16	31.7	8.0	32.7	26.7	6.00	5.456	
1,500.0	1,500.0	1,479.0	1,479.0	3.2	3.2	14.16	31.7	8.0	32.7	26.3	6.45	5.075	
1,600.0	1,600.0	1,579.0	1,579.0	3.5	3.4	14.16	31.7	8.0	32.7	25.8	6.90	4.745	
1,700.0	1,700.0	1,679.0	1,679.0	3.7	3.7	14.16	31.7	8.0	32.7	25.4	7.35	4.454	
1,800.0	1,800.0	1,779.0	1,779.0	3.9	3.9	14.16	31.7	8.0	32.7	24.9	7.80	4.198	
1,900.0	1,900.0	1,879.0	1,879.0	4.1	4.1	14.16	31.7	8.0	32.7	24.5	8.25	3.969	
2,000.0	2,000.0	1,979.0	1,979.0	4.4	4.3	14.16	31.7	8.0	32.7	24.0	8.70	3.764	
2,100.0	2,100.0	2,079.0	2,079.0	4.6	4.6	14.16	31.7	8.0	32.7	23.6	9.15	3.579	
2,200.0	2,200.0	2,179.0	2,179.0	4.8	4.8	14.16	31.7	8.0	32.7	23.1	9.60	3.411	
2,300.0	2,300.0	2,279.0	2,279.0	5.0	5.0	14.16	31.7	8.0	32.7	22.7	10.05	3.258	
2,400.0	2,400.0	2,379.0	2,379.0	5.3	5.2	14.16	31.7	8.0	32.7	22.2	10.50	3.119	
2,500.0	2,500.0	2,479.0	2,479.0	5.5	5.5	14.16	31.7	8.0	32.7	21.8	10.94	2.991	
2,600.0	2,600.0	2,579.0	2,579.0	5.7	5.7	14.16	31.7	8.0	32.7	21.3	11.39	2.873	
2,700.0	2,700.0	2,679.0	2,679.0	5.9	5.9	14.16	31.7	8.0	32.7	20.9	11.84	2.764	
2,800.0	2,800.0	2,779.0	2,779.0	6.2	6.1	14.16	31.7	8.0	32.7	20.4	12.29	2.663	
2,900.0	2,900.0	2,879.0	2,879.0	6.4	6.4	14.16	31.7	8.0	32.7	20.0	12.74	2.569	
3,000.0	3,000.0	2,979.0	2,979.0	6.6	6.6	14.16	31.7	8.0	32.7	19.5	13.19	2.481	
3,100.0	3,100.0	3,079.0	3,079.0	6.8	6.8	14.16	31.7	8.0	32.7	19.1	13.64	2.400	
3,200.0	3,200.0	3,179.0	3,179.0	7.1	7.0	14.16	31.7	8.0	32.7	18.6	14.09	2.323	
3,300.0	3,300.0	3,279.0	3,279.0	7.3	7.3	14.16	31.7	8.0	32.7	18.2	14.54	2.251	
3,400.0	3,400.0	3,379.0	3,379.0	7.5	7.5	14.16	31.7	8.0	32.7	17.7	14.99	2.184	
3,500.0	3,500.0	3,479.0	3,479.0	7.7	7.7	14.16	31.7	8.0	32.7	17.3	15.44	2.120	
3,600.0	3,600.0	3,579.0	3,579.0	8.0	7.9	14.16	31.7	8.0	32.7	16.8	15.89	2.060	
3,700.0	3,700.0	3,679.0	3,679.0	8.2	8.2	14.16	31.7	8.0	32.7	16.4	16.34	2.003	
3,800.0	3,800.0	3,779.0	3,779.0	8.4	8.4	14.16	31.7	8.0	32.7	15.9	16.79	1.950 Level 4	
3,900.0	3,900.0	3,879.0	3,879.0	8.6	8.6	14.16	31.7	8.0	32.7	15.5	17.24	1.899 Level 4	
4,000.0	4,000.0	3,979.0	3,979.0	8.9	8.8	14.16	31.7	8.0	32.7	15.0	17.69	1.851 Level 4	
4,100.0	4,100.0	4,079.0	4,079.0	9.1	9.1	-60.07	31.7	8.0	31.8	13.7	18.13	1.756 Level 4	
4,200.0	4,199.8	4,178.8	4,178.8	9.3	9.3	-68.92	31.7	8.0	29.6	11.0	18.56	1.593 Level 4	
4,300.0	4,299.5	4,278.5	4,278.5	9.5	9.5	-86.00	31.7	8.0	27.6	8.6	19.00	1.455 Level 3	
4,318.0	4,317.3	4,296.3	4,296.3	9.5	9.5	-89.99	31.7	8.0	27.6	8.5	19.08	1.446 Level 3, CC, ES, SF	
4,400.0	4,398.7	4,377.7	4,377.7	9.7	9.7	-110.20	31.7	8.0	29.4	10.0	19.42	1.515 Level 4	
4,500.0	4,497.5	4,476.5	4,476.5	9.9	9.9	-132.75	31.7	8.0	37.8	18.0	19.78	1.913 Level 4	
4,600.0	4,595.6	4,574.6	4,574.6	10.2	10.2	-147.91	31.7	8.0	52.8	32.7	20.10	2.625	
4,700.0	4,693.1	4,672.1	4,672.1	10.5	10.4	-157.15	31.7	8.0	72.9	52.5	20.41	3.572	
4,800.0	4,789.6	4,768.6	4,768.6	10.8	10.6	-162.91	31.7	8.0	97.3	76.6	20.71	4.701	
4,900.0	4,885.3	4,864.3	4,864.3	11.1	10.8	-166.69	31.7	8.0	125.6	104.6	21.00	5.984	
4,999.2	4,979.1	4,958.1	4,958.1	11.5	11.0	-169.27	31.7	8.0	157.3	136.0	21.28	7.393	

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 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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-S7 - Hebron 1-18HR - Wellbore #1 - Hebron 1-18HR												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	5,073.8	5,055.1	5,055.1	11.9	11.2	-171.36	31.4	8.4	191.0	169.3	21.70	8.803	
5,200.0	5,167.8	5,154.1	5,154.0	12.3	11.4	-173.49	29.0	11.2	222.8	200.7	22.10	10.081	
5,300.0	5,261.8	5,254.0	5,253.6	12.8	11.6	-175.75	24.4	16.5	252.8	230.3	22.50	11.235	
5,400.0	5,355.7	5,354.5	5,353.6	13.3	11.8	-178.14	17.5	24.6	281.3	258.4	22.92	12.272	
5,500.0	5,449.7	5,455.5	5,453.6	13.8	12.0	179.34	8.2	35.4	308.4	285.1	23.37	13.200	
5,600.0	5,543.7	5,556.7	5,553.2	14.3	12.2	176.69	-3.4	48.9	334.4	310.5	23.84	14.026	
5,700.0	5,637.7	5,657.8	5,652.0	14.9	12.4	173.92	-17.2	65.1	359.3	335.0	24.35	14.756	
5,800.0	5,731.6	5,755.9	5,747.2	15.4	12.7	171.17	-32.5	83.0	383.8	358.9	24.90	15.411	
5,900.0	5,825.6	5,851.3	5,839.8	16.0	12.9	168.77	-47.7	100.6	408.8	383.3	25.49	16.040	
6,000.0	5,919.6	5,946.7	5,932.3	16.6	13.2	166.63	-62.8	118.3	434.5	408.3	26.11	16.640	
6,100.0	6,013.6	6,042.1	6,024.9	17.2	13.5	164.74	-78.0	136.0	460.6	433.8	26.76	17.212	
6,200.0	6,107.6	6,137.6	6,117.4	17.8	13.8	163.04	-93.1	153.7	487.2	459.8	27.44	17.755	
6,300.0	6,201.5	6,233.0	6,210.0	18.4	14.1	161.52	-108.3	171.3	514.1	486.0	28.15	18.267	
6,345.1	6,243.9	6,276.0	6,251.7	18.6	14.2	160.88	-115.1	179.3	526.4	497.9	28.47	18.488	
6,350.0	6,248.5	6,280.7	6,256.2	18.7	14.2	159.31	-115.8	180.2	527.7	499.2	28.55	18.487	
6,375.0	6,272.2	6,317.6	6,292.1	18.8	14.4	150.69	-121.2	187.0	533.7	504.8	28.93	18.447	
6,400.0	6,296.0	6,378.3	6,351.7	18.9	14.5	141.71	-124.3	197.7	537.5	508.2	29.30	18.346	
6,425.0	6,319.9	6,438.6	6,410.9	19.0	14.7	133.05	-119.8	207.6	538.5	509.0	29.52	18.245	
6,450.0	6,343.8	6,495.4	6,466.0	19.1	14.8	125.08	-108.7	216.1	537.0	507.4	29.60	18.142	
6,475.0	6,367.7	6,546.6	6,514.2	19.2	14.9	118.16	-93.1	222.9	533.4	503.8	29.59	18.028	
6,500.0	6,391.5	6,590.9	6,554.6	19.3	15.0	112.53	-75.5	228.2	528.0	498.5	29.52	17.890	
6,525.0	6,415.1	6,628.3	6,587.2	19.4	15.0	108.20	-57.8	232.1	521.4	492.0	29.43	17.716	
6,550.0	6,438.5	6,659.0	6,613.0	19.5	15.1	105.00	-41.3	234.9	513.9	484.5	29.36	17.502	
6,575.0	6,461.6	6,683.9	6,633.1	19.5	15.1	102.70	-26.8	237.0	505.9	476.6	29.33	17.251	
6,600.0	6,484.3	6,703.7	6,648.6	19.6	15.1	101.05	-14.5	238.5	497.8	468.4	29.32	16.975	
6,625.0	6,506.6	6,719.3	6,660.4	19.6	15.1	99.84	-4.4	239.5	489.7	460.3	29.35	16.686	
6,645.8	6,524.8	6,729.5	6,668.0	19.7	15.1	99.05	2.5	240.1	483.2	453.8	29.38	16.445	
6,700.0	6,571.7	6,750.2	6,682.8	19.7	15.2	101.50	16.7	241.3	469.1	439.6	29.48	15.912	
6,795.8	6,654.7	6,776.0	6,700.6	19.9	15.2	104.63	35.5	242.5	457.6	427.9	29.66	15.427	
6,800.0	6,658.3	6,776.9	6,701.1	19.9	15.2	104.47	36.2	242.5	457.5	427.8	29.67	15.420	
6,807.6	6,664.9	6,778.4	6,702.1	19.9	15.2	104.18	37.3	242.6	457.5	427.8	29.69	15.410	
6,825.0	6,679.5	6,781.3	6,704.0	20.0	15.2	103.50	39.4	242.7	457.8	428.0	29.72	15.402	
6,850.0	6,700.1	6,784.1	6,705.9	20.0	15.2	102.44	41.6	242.8	459.2	429.5	29.77	15.426	
6,875.0	6,719.9	6,785.6	6,706.9	20.1	15.2	101.26	42.7	242.9	462.0	432.2	29.82	15.491	
6,900.0	6,738.8	6,785.9	6,707.1	20.1	15.2	99.95	42.9	242.9	466.0	436.1	29.88	15.595	
6,925.0	6,757.0	6,785.2	6,706.6	20.2	15.2	98.48	42.4	242.8	471.2	441.2	29.95	15.734	
6,950.0	6,774.2	6,783.6	6,705.6	20.2	15.2	96.86	41.2	242.8	477.5	447.5	30.02	15.907	
6,975.0	6,790.5	6,781.2	6,704.0	20.3	15.2	95.08	39.4	242.7	484.9	454.8	30.10	16.110	
7,000.0	6,805.8	6,775.0	6,699.9	20.4	15.2	92.79	34.7	242.4	493.3	463.2	30.18	16.345	
7,025.0	6,820.1	6,775.0	6,699.9	20.4	15.2	91.20	34.7	242.4	502.6	472.3	30.27	16.604	
7,050.0	6,833.3	6,770.0	6,696.5	20.5	15.2	88.95	31.0	242.2	512.7	482.3	30.35	16.894	
7,075.0	6,845.4	6,765.1	6,693.2	20.5	15.2	86.68	27.5	242.0	523.5	493.1	30.41	17.215	
7,100.0	6,856.4	6,759.8	6,689.6	20.6	15.2	84.34	23.6	241.8	534.9	504.4	30.44	17.569	
7,125.0	6,866.1	6,750.0	6,682.7	20.7	15.2	81.51	16.6	241.3	546.8	516.3	30.42	17.971	
7,150.0	6,874.7	6,750.0	6,682.7	20.8	15.2	79.73	16.6	241.3	559.0	528.6	30.42	18.375	
7,175.0	6,882.1	6,741.6	6,676.7	20.9	15.2	77.10	10.7	240.8	571.7	541.3	30.33	18.846	
7,200.0	6,888.2	6,734.9	6,671.9	20.9	15.1	74.69	6.1	240.4	584.5	554.3	30.21	19.348	
7,225.0	6,893.0	6,725.0	6,664.6	21.0	15.1	72.06	-0.6	239.8	597.6	567.5	30.02	19.907	
7,250.0	6,896.6	6,725.0	6,664.6	21.2	15.1	70.36	-0.6	239.8	610.7	580.8	29.88	20.435	
7,275.0	6,898.9	6,713.1	6,655.8	21.3	15.1	67.77	-8.4	239.1	623.8	594.2	29.60	21.073	
7,300.0	6,899.9	6,700.0	6,645.7	21.4	15.1	65.23	-16.9	238.2	636.9	607.7	29.28	21.753	
7,307.1	6,900.0	6,700.0	6,645.7	21.4	15.1	64.81	-16.9	238.2	640.6	611.4	29.23	21.918	

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 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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-S7 - Hebron 1-18HR - Wellbore #1 - Hebron 1-18HR												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	
7,400.0	6,900.0	6,675.0	6,626.0	22.0	15.1	63.06	-32.1	236.3	692.4	662.8	29.63	23.365	
7,500.0	6,900.0	6,650.0	6,605.5	22.7	15.1	61.32	-46.3	234.1	755.0	724.8	30.20	24.999	
7,600.0	6,900.0	6,625.0	6,584.4	23.7	15.0	59.61	-59.4	231.8	823.4	792.5	30.85	26.688	
7,700.0	6,900.0	6,610.4	6,571.7	24.7	15.0	58.62	-66.6	230.3	896.6	864.8	31.72	28.265	
7,800.0	6,900.0	6,600.0	6,562.6	25.9	15.0	57.93	-71.4	229.2	973.7	941.0	32.72	29.763	
7,900.0	6,900.0	6,575.0	6,540.3	27.1	15.0	56.29	-82.2	226.4	1,054.0	1,020.5	33.53	31.437	
8,000.0	6,900.0	6,575.0	6,540.3	28.5	15.0	56.29	-82.2	226.4	1,137.0	1,102.2	34.79	32.686	
8,100.0	6,900.0	6,550.0	6,517.4	29.9	14.9	54.70	-91.9	223.3	1,222.1	1,186.4	35.64	34.287	
8,200.0	6,900.0	6,550.0	6,517.4	31.4	14.9	54.70	-91.9	223.3	1,309.0	1,272.0	36.97	35.407	
8,300.0	6,900.0	6,536.0	6,504.4	32.9	14.9	53.83	-96.8	221.6	1,397.3	1,359.3	38.05	36.721	
8,400.0	6,900.0	6,525.0	6,494.1	34.4	14.9	53.17	-100.3	220.1	1,487.0	1,447.8	39.20	37.930	
8,500.0	6,900.0	6,525.0	6,494.1	36.0	14.9	53.17	-100.3	220.1	1,577.8	1,537.2	40.60	38.864	
8,600.0	6,900.0	6,513.4	6,483.1	37.7	14.8	52.48	-103.8	218.6	1,669.5	1,627.7	41.75	39.985	
8,700.0	6,900.0	6,500.0	6,470.4	39.3	14.8	51.70	-107.5	216.7	1,762.0	1,719.2	42.86	41.108	
8,800.0	6,900.0	6,500.0	6,470.4	41.0	14.8	51.70	-107.5	216.7	1,855.2	1,810.9	44.29	41.886	
8,900.0	6,900.0	6,500.0	6,470.4	42.7	14.8	51.70	-107.5	216.7	1,949.0	1,903.2	45.73	42.618	
9,000.0	6,900.0	6,500.0	6,470.4	44.4	14.8	51.70	-107.5	216.7	2,043.3	1,996.2	47.18	43.306	
9,100.0	6,900.0	6,486.8	6,457.8	46.2	14.8	50.95	-110.8	214.8	2,138.0	2,089.7	48.29	44.272	
9,200.0	6,900.0	6,475.0	6,446.4	47.9	14.8	50.29	-113.4	213.1	2,233.3	2,183.8	49.43	45.184	
9,300.0	6,900.0	6,475.0	6,446.4	49.7	14.8	50.29	-113.4	213.1	2,328.8	2,277.9	50.88	45.766	
9,400.0	6,900.0	6,475.0	6,446.4	51.5	14.8	50.29	-113.4	213.1	2,424.6	2,372.3	52.35	46.316	
9,500.0	6,900.0	6,475.0	6,446.4	53.3	14.8	50.29	-113.4	213.1	2,520.8	2,467.0	53.82	46.836	
9,600.0	6,900.0	6,475.0	6,446.4	55.1	14.8	50.29	-113.4	213.1	2,617.3	2,562.0	55.30	47.328	
9,700.0	6,900.0	6,475.0	6,446.4	56.9	14.8	50.29	-113.4	213.1	2,714.0	2,657.2	56.78	47.795	
9,800.0	6,900.0	6,462.8	6,434.5	58.7	14.7	49.63	-115.9	211.3	2,810.7	2,752.9	57.87	48.571	
9,900.0	6,900.0	6,450.0	6,422.1	60.5	14.7	48.95	-118.1	209.4	2,907.9	2,849.0	58.92	49.353	
10,000.0	6,900.0	6,450.0	6,422.1	62.3	14.7	48.95	-118.1	209.4	3,005.1	2,944.7	60.39	49.759	
10,100.0	6,900.0	6,450.0	6,422.1	64.2	14.7	48.95	-118.1	209.4	3,102.5	3,040.6	61.87	50.145	
10,200.0	6,900.0	6,450.0	6,422.1	66.0	14.7	48.95	-118.1	209.4	3,200.0	3,136.7	63.35	50.513	
10,300.0	6,900.0	6,450.0	6,422.1	67.9	14.7	48.95	-118.1	209.4	3,297.7	3,232.9	64.83	50.864	
10,400.0	6,900.0	6,450.0	6,422.1	69.7	14.7	48.95	-118.1	209.4	3,395.5	3,329.2	66.32	51.199	
10,500.0	6,900.0	6,450.0	6,422.1	71.6	14.7	48.95	-118.1	209.4	3,493.5	3,425.7	67.81	51.520	
10,600.0	6,900.0	6,450.0	6,422.1	73.4	14.7	48.95	-118.1	209.4	3,591.5	3,522.2	69.30	51.826	
10,700.0	6,900.0	6,450.0	6,422.1	75.3	14.7	48.95	-118.1	209.4	3,689.7	3,618.9	70.79	52.120	
10,800.0	6,900.0	6,450.0	6,422.1	77.2	14.7	48.95	-118.1	209.4	3,787.9	3,715.6	72.29	52.401	
10,900.0	6,900.0	6,450.0	6,422.1	79.0	14.7	48.95	-118.1	209.4	3,886.3	3,812.5	73.78	52.671	
11,000.0	6,900.0	6,438.7	6,411.1	80.9	14.7	48.37	-119.8	207.6	3,984.5	3,909.7	74.79	53.273	
11,100.0	6,900.0	6,437.3	6,409.7	82.8	14.7	48.30	-120.0	207.4	4,083.0	4,006.8	76.22	53.568	
11,200.0	6,900.0	6,425.0	6,397.6	84.6	14.7	47.68	-121.5	205.4	4,181.7	4,104.5	77.17	54.191	
11,300.0	6,900.0	6,425.0	6,397.6	86.5	14.7	47.68	-121.5	205.4	4,280.2	4,201.6	78.65	54.424	
11,400.0	6,900.0	6,425.0	6,397.6	88.4	14.7	47.68	-121.5	205.4	4,378.9	4,298.7	80.13	54.649	
11,500.0	6,900.0	6,425.0	6,397.6	90.3	14.7	47.68	-121.5	205.4	4,477.5	4,395.9	81.61	54.865	
11,600.0	6,900.0	6,425.0	6,397.6	92.2	14.7	47.68	-121.5	205.4	4,576.3	4,493.2	83.09	55.074	
11,700.0	6,900.0	6,425.0	6,397.6	94.1	14.7	47.68	-121.5	205.4	4,675.1	4,590.5	84.58	55.275	
11,800.0	6,900.0	6,425.0	6,397.6	96.0	14.7	47.68	-121.5	205.4	4,773.9	4,687.9	86.06	55.469	
11,820.7	6,900.0	6,425.0	6,397.6	96.3	14.7	47.68	-121.5	205.4	4,794.4	4,708.1	86.30	55.553	

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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-S7 - Hebron 5-18H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 50-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 Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	117.60	-40.3	77.0	89.4				
100.0	100.0	79.5	79.5	0.1	0.1	117.74	-40.3	76.6	86.6	86.4	0.21	406.551	
200.0	200.0	179.3	179.3	0.3	0.3	118.21	-40.7	75.8	86.1	85.4	0.65	131.930	
300.0	300.0	279.0	279.0	0.5	0.6	118.92	-41.6	75.2	85.9	84.9	1.09	78.679	
400.0	400.0	379.1	379.1	0.8	0.8	120.15	-43.1	74.3	85.9	84.3	1.54	55.815	
500.0	500.0	479.2	479.1	1.0	1.0	121.71	-45.1	73.0	85.8	83.8	1.98	43.381	
600.0	600.0	579.3	579.2	1.2	1.2	123.93	-47.8	71.0	85.6	83.2	2.42	35.306	
700.0	700.0	680.0	679.9	1.4	1.4	126.57	-50.7	68.3	85.1	82.2	2.87	29.672	
800.0	800.0	780.0	779.7	1.7	1.7	129.71	-53.7	64.7	84.1	80.8	3.31	25.399	
900.0	900.0	880.0	879.6	1.9	1.9	133.26	-57.1	60.7	83.3	79.6	3.75	22.201	
1,000.0	1,000.0	980.0	979.4	2.1	2.1	136.94	-60.5	56.5	82.7	78.6	4.20	19.723	
1,100.0	1,100.0	1,080.0	1,079.3	2.3	2.3	140.54	-63.6	52.3	82.3	77.7	4.63	17.793	
1,200.0	1,200.0	1,180.1	1,179.4	2.6	2.5	142.52	-64.9	49.8	81.8	76.8	5.05	16.205	
1,300.0	1,300.0	1,279.8	1,279.0	2.8	2.7	143.00	-65.2	49.2	81.7	76.2	5.47	14.934	
1,400.0	1,400.0	1,379.8	1,379.1	3.0	2.9	143.04	-65.3	49.1	81.7	75.8	5.90	13.840	
1,500.0	1,500.0	1,479.9	1,479.1	3.2	3.1	143.04	-65.1	49.0	81.5	75.2	6.33	12.876	
1,600.0	1,600.0	1,579.9	1,579.1	3.5	3.3	143.01	-65.0	49.0	81.4	74.6	6.76	12.044	
1,700.0	1,700.0	1,679.8	1,679.1	3.7	3.5	142.95	-64.9	49.0	81.3	74.1	7.18	11.315	
1,775.1	1,775.1	1,754.8	1,754.1	3.9	3.7	143.01	-64.9	48.9	81.2	73.7	7.51	10.818	
1,800.0	1,800.0	1,779.7	1,779.0	3.9	3.7	143.03	-64.9	48.9	81.3	73.6	7.62	10.665	
1,900.0	1,900.0	1,879.8	1,879.1	4.1	4.0	143.10	-65.0	48.8	81.3	73.2	8.05	10.097	
2,000.0	2,000.0	1,979.9	1,979.1	4.4	4.2	143.12	-64.9	48.7	81.1	72.7	8.48	9.563	
2,100.0	2,100.0	2,079.8	2,079.1	4.6	4.4	143.20	-64.9	48.5	81.0	72.1	8.92	9.081	
2,200.0	2,200.0	2,179.9	2,179.1	4.8	4.6	143.24	-64.8	48.4	80.9	71.6	9.35	8.649	
2,300.0	2,300.0	2,279.9	2,279.1	5.0	4.8	143.23	-64.7	48.4	80.8	71.0	9.79	8.253	
2,368.6	2,368.6	2,348.4	2,347.6	5.2	4.9	143.29	-64.7	48.3	80.7	70.6	10.09	8.002	
2,400.0	2,400.0	2,379.7	2,378.9	5.3	5.0	143.32	-64.7	48.2	80.7	70.5	10.22	7.896	
2,500.0	2,500.0	2,479.6	2,478.9	5.5	5.2	143.37	-64.9	48.2	80.9	70.2	10.66	7.588	
2,600.0	2,600.0	2,579.9	2,579.1	5.7	5.4	143.35	-64.9	48.3	80.8	69.8	11.09	7.291	
2,700.0	2,700.0	2,679.8	2,679.0	5.9	5.6	143.35	-64.8	48.2	80.8	69.3	11.52	7.013	
2,780.9	2,780.9	2,760.7	2,759.9	6.1	5.8	143.41	-64.8	48.1	80.8	68.9	11.87	6.805	
2,800.0	2,800.0	2,779.8	2,779.0	6.2	5.8	143.43	-64.9	48.1	80.8	68.8	11.95	6.758	
2,900.0	2,900.0	2,879.6	2,878.9	6.4	6.0	143.46	-65.0	48.2	80.9	68.5	12.38	6.531	
3,000.0	3,000.0	2,979.7	2,978.9	6.6	6.2	143.49	-65.1	48.2	81.0	68.2	12.82	6.320	
3,100.0	3,100.0	3,079.9	3,079.1	6.8	6.4	143.47	-65.0	48.2	81.0	67.7	13.25	6.108	
3,200.0	3,200.0	3,179.8	3,179.0	7.1	6.7	143.53	-65.0	48.1	80.9	67.2	13.69	5.909	
3,300.0	3,300.0	3,279.8	3,279.0	7.3	6.9	143.57	-65.1	48.0	80.9	66.7	14.13	5.724	
3,400.0	3,400.0	3,379.8	3,379.0	7.5	7.1	143.65	-65.1	47.9	80.8	66.3	14.56	5.549	
3,450.2	3,450.2	3,430.0	3,429.2	7.6	7.2	143.67	-65.1	47.9	80.8	66.0	14.78	5.467	
3,500.0	3,500.0	3,479.8	3,479.0	7.7	7.3	143.68	-65.1	47.9	80.8	65.8	15.00	5.388	
3,600.0	3,600.0	3,579.8	3,579.0	8.0	7.5	143.76	-65.2	47.8	80.8	65.4	15.43	5.236	
3,700.0	3,700.0	3,679.8	3,679.0	8.2	7.7	143.69	-65.1	47.8	80.7	64.9	15.87	5.089	
3,800.0	3,800.0	3,779.8	3,779.0	8.4	7.9	143.71	-65.1	47.8	80.7	64.4	16.30	4.951	
3,900.0	3,900.0	3,879.8	3,879.0	8.6	8.1	143.77	-65.1	47.7	80.7	63.9	16.74	4.820	
4,000.0	4,000.0	3,979.9	3,979.1	8.9	8.3	143.68	-65.0	47.7	80.6	63.4	17.17	4.694	
4,100.0	4,100.0	4,079.7	4,078.9	9.1	8.5	73.27	-64.8	47.7	80.0	62.4	17.62	4.542	
4,200.0	4,199.8	4,179.6	4,178.8	9.3	8.7	76.87	-64.8	47.9	78.7	60.7	18.03	4.366	
4,300.0	4,299.5	4,279.3	4,278.5	9.5	9.0	83.15	-64.8	47.9	77.2	58.7	18.44	4.184	
4,382.6	4,381.5	4,361.3	4,360.5	9.7	9.1	90.33	-64.7	48.0	76.5	57.7	18.79	4.072 CC	
4,400.0	4,398.7	4,378.5	4,377.8	9.7	9.2	92.06	-64.6	48.0	76.6	57.7	18.86	4.058 ES, SF	
4,500.0	4,497.5	4,477.1	4,476.4	9.9	9.4	103.32	-64.6	48.0	78.7	59.4	19.29	4.080	
4,600.0	4,595.6	4,575.4	4,574.6	10.2	9.6	115.69	-64.7	47.9	85.3	65.6	19.70	4.330	

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 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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												Offset Site Error:	0.0 usft
Survey Program: 50-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	
4,700.0	4,693.1	4,672.7	4,671.9	10.5	9.8	127.33	-64.8	47.8	97.5	77.4	20.06	4.859	
4,800.0	4,789.6	4,769.3	4,768.5	10.8	10.0	137.16	-65.0	47.8	115.4	95.0	20.38	5.663	
4,900.0	4,885.3	4,864.8	4,864.1	11.1	10.2	145.00	-65.1	47.8	138.7	118.1	20.67	6.713	
4,999.2	4,979.1	4,958.8	4,958.0	11.5	10.4	151.01	-65.2	47.8	166.6	145.7	20.94	7.960	
5,100.0	5,073.8	5,053.6	5,052.8	11.9	10.6	155.78	-65.3	47.8	197.8	176.5	21.31	9.283	
5,200.0	5,167.8	5,147.1	5,146.4	12.3	10.8	159.24	-65.3	47.7	229.8	208.1	21.71	10.586	
5,300.0	5,261.8	5,241.1	5,240.3	12.8	11.0	161.87	-65.4	47.6	262.4	240.3	22.12	11.864	
5,400.0	5,355.7	5,335.0	5,334.2	13.3	11.2	163.92	-65.5	47.5	295.4	272.9	22.54	13.108	
5,500.0	5,449.7	5,429.5	5,428.7	13.8	11.4	165.58	-65.5	47.4	328.6	305.6	22.96	14.309	
5,600.0	5,543.7	5,523.8	5,523.1	14.3	11.5	166.94	-65.5	47.4	361.8	338.4	23.40	15.465	
5,700.0	5,637.7	5,617.1	5,616.3	14.9	11.7	168.05	-65.5	47.4	395.3	371.5	23.84	16.584	
5,800.0	5,731.6	5,711.6	5,710.8	15.4	11.9	169.00	-65.5	47.4	428.9	404.6	24.28	17.663	
5,900.0	5,825.6	5,804.7	5,803.9	16.0	12.1	169.81	-65.4	47.3	462.6	437.9	24.73	18.707	
6,000.0	5,919.6	5,898.5	5,897.7	16.6	12.3	170.51	-65.5	47.2	496.5	471.3	25.18	19.715	
6,100.0	6,013.6	5,993.7	5,993.0	17.2	12.5	171.13	-65.5	47.1	530.3	504.7	25.64	20.682	
6,200.0	6,107.6	6,086.7	6,085.9	17.8	12.7	171.66	-65.4	47.1	564.2	538.1	26.10	21.615	
6,300.0	6,201.5	6,180.9	6,180.1	18.4	12.9	172.14	-65.5	47.0	598.2	571.6	26.57	22.516	
6,345.1	6,243.9	6,223.4	6,222.7	18.6	13.0	172.34	-65.4	46.9	613.5	586.7	26.78	22.911	
6,350.0	6,248.5	6,228.1	6,227.3	18.7	13.0	170.80	-65.4	46.9	615.1	588.3	26.83	22.928	
6,375.0	6,272.2	6,251.7	6,250.9	18.8	13.1	162.42	-65.3	46.9	623.1	596.0	27.08	23.009	
6,400.0	6,296.0	6,276.1	6,275.4	18.9	13.1	153.16	-65.3	46.9	630.2	602.9	27.31	23.076	
6,425.0	6,319.9	6,295.0	6,294.3	19.0	13.2	143.22	-65.3	46.8	636.6	609.0	27.51	23.141	
6,450.0	6,343.8	6,313.0	6,312.2	19.1	13.2	133.11	-65.5	46.7	642.4	614.7	27.68	23.206	
6,475.0	6,367.7	6,323.7	6,322.9	19.2	13.2	123.29	-65.8	46.5	647.7	619.9	27.82	23.281	
6,500.0	6,391.5	6,334.7	6,333.9	19.3	13.2	114.35	-66.2	46.1	652.7	624.8	27.94	23.361	
6,525.0	6,415.1	6,345.0	6,344.2	19.4	13.3	106.53	-66.8	45.6	657.4	629.4	28.04	23.449	
6,550.0	6,438.5	6,356.2	6,355.3	19.5	13.3	99.91	-67.6	45.0	661.8	633.7	28.11	23.541	
6,575.0	6,461.6	6,366.7	6,365.8	19.5	13.3	94.38	-68.6	44.2	665.8	637.7	28.17	23.640	
6,600.0	6,484.3	6,376.0	6,375.0	19.6	13.3	89.76	-69.6	43.4	669.6	641.4	28.20	23.745	
6,625.0	6,506.6	6,387.7	6,386.5	19.6	13.4	86.01	-71.1	42.2	673.0	644.8	28.22	23.851	
6,645.8	6,524.8	6,396.4	6,395.1	19.7	13.4	83.38	-72.4	41.3	675.6	647.4	28.22	23.941	
6,700.0	6,571.7	6,421.7	6,419.7	19.7	13.4	84.21	-77.0	38.0	683.3	654.9	28.41	24.049	
6,795.8	6,654.7	6,478.4	6,474.0	19.9	13.6	85.79	-90.8	29.5	702.0	673.2	28.82	24.360	
6,800.0	6,658.3	6,481.3	6,476.8	19.9	13.6	85.48	-91.7	29.0	702.9	674.1	28.83	24.382	
6,825.0	6,679.5	6,499.0	6,493.4	20.0	13.6	83.84	-97.1	26.2	708.3	679.4	28.90	24.508	
6,850.0	6,700.1	6,514.7	6,508.0	20.0	13.7	82.44	-102.3	23.8	713.4	684.5	28.96	24.632	
6,875.0	6,719.9	6,535.0	6,526.6	20.1	13.7	81.41	-109.7	20.5	718.5	689.4	29.03	24.746	
6,900.0	6,738.8	6,544.1	6,534.8	20.1	13.8	80.27	-113.3	19.0	723.3	694.2	29.08	24.872	
6,925.0	6,757.0	6,557.9	6,547.2	20.2	13.8	79.42	-118.9	16.6	728.0	698.9	29.14	24.986	
6,950.0	6,774.2	6,567.0	6,555.2	20.2	13.8	78.55	-122.8	15.0	732.6	703.4	29.18	25.109	
6,975.0	6,790.5	6,582.5	6,568.8	20.3	13.9	78.01	-129.9	12.2	737.1	707.9	29.24	25.208	
7,000.0	6,805.8	6,599.0	6,582.9	20.4	13.9	77.62	-137.8	9.0	741.7	712.3	29.31	25.301	
7,025.0	6,820.1	6,599.0	6,582.9	20.4	13.9	76.71	-137.8	9.0	746.1	716.8	29.33	25.441	
7,050.0	6,833.3	6,614.6	6,595.9	20.5	14.0	76.47	-145.7	5.7	750.5	721.1	29.41	25.521	
7,075.0	6,845.4	6,630.0	6,608.5	20.5	14.1	76.30	-153.9	2.2	755.0	725.5	29.49	25.598	
7,100.0	6,856.4	6,630.0	6,608.5	20.6	14.1	75.54	-153.9	2.2	759.4	729.9	29.51	25.733	
7,125.0	6,866.1	6,645.0	6,620.5	20.7	14.1	75.49	-162.1	-1.5	763.8	734.2	29.61	25.793	
7,150.0	6,874.7	6,662.0	6,633.7	20.8	14.2	75.59	-171.8	-5.8	768.2	738.5	29.74	25.833	
7,175.0	6,882.1	6,662.0	6,633.7	20.9	14.2	74.95	-171.8	-5.8	772.6	742.8	29.76	25.957	
7,200.0	6,888.2	6,677.6	6,645.5	20.9	14.2	75.09	-181.1	-10.0	776.9	747.0	29.91	25.980	
7,225.0	6,893.0	6,694.0	6,657.5	21.0	14.3	75.32	-191.3	-14.6	781.3	751.2	30.07	25.986	
7,250.0	6,896.6	6,701.4	6,662.8	21.2	14.4	75.15	-196.1	-16.7	785.6	755.4	30.17	26.038	

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 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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-S7 - Hebron 5-18H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 50-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	
7,275.0	6,898.9	6,714.6	6,672.1	21.3	14.4	75.31	-204.8	-20.4	789.8	759.5	30.33	26.039	
7,300.0	6,899.9	6,726.0	6,679.8	21.4	14.5	75.41	-212.4	-23.7	794.0	763.5	30.49	26.043	
7,307.1	6,900.0	6,726.0	6,679.8	21.4	14.5	75.27	-212.4	-23.7	795.2	764.7	30.50	26.069	
7,400.0	6,900.0	6,773.8	6,710.2	22.0	14.7	77.67	-246.4	-38.1	814.1	782.4	31.74	25.647	
7,500.0	6,900.0	6,820.0	6,736.2	22.7	15.0	79.72	-281.3	-53.6	841.7	808.5	33.18	25.367	
7,600.0	6,900.0	6,893.2	6,769.5	23.7	15.6	82.34	-340.6	-80.2	875.0	839.9	35.02	24.987	
7,700.0	6,900.0	6,996.9	6,799.9	24.7	16.5	84.69	-432.5	-117.0	908.8	871.5	37.26	24.390	
7,800.0	6,900.0	7,079.6	6,810.1	25.9	17.4	85.53	-509.3	-145.8	943.0	903.5	39.43	23.914	
7,900.0	6,900.0	7,157.0	6,815.1	27.1	18.3	85.97	-581.2	-174.0	979.0	937.3	41.69	23.484	
8,000.0	6,900.0	7,234.9	6,817.9	28.5	19.2	86.28	-653.3	-203.5	1,016.6	972.5	44.05	23.079	
8,100.0	6,900.0	7,319.3	6,821.5	29.9	20.2	86.61	-730.9	-236.4	1,055.2	1,008.8	46.47	22.708	
8,200.0	6,900.0	7,401.4	6,825.8	31.4	21.2	86.97	-806.0	-269.0	1,094.8	1,045.8	49.03	22.330	
8,300.0	6,900.0	7,476.4	6,829.8	32.9	22.3	87.28	-874.5	-299.4	1,135.1	1,083.5	51.60	21.998	
8,400.0	6,900.0	7,568.9	6,834.1	34.4	23.6	87.60	-958.6	-337.7	1,176.4	1,121.9	54.43	21.611	
8,500.0	6,900.0	7,638.6	6,837.5	36.0	24.6	87.84	-1,021.9	-366.9	1,218.1	1,161.1	57.04	21.355	
8,600.0	6,900.0	7,715.0	6,839.5	37.7	25.8	88.01	-1,090.5	-400.3	1,261.7	1,201.8	59.84	21.084	
8,700.0	6,900.0	7,809.3	6,841.6	39.3	27.2	88.18	-1,175.2	-441.5	1,305.3	1,242.5	62.83	20.774	
8,800.0	6,900.0	7,898.4	6,844.6	41.0	28.6	88.38	-1,255.4	-480.5	1,348.9	1,283.1	65.81	20.498	
8,900.0	6,900.0	7,993.7	6,847.3	42.7	30.1	88.56	-1,341.2	-521.7	1,392.2	1,323.2	68.94	20.194	
9,000.0	6,900.0	8,081.8	6,848.0	44.4	31.6	88.63	-1,420.8	-559.7	1,435.2	1,363.2	72.03	19.926	
9,100.0	6,900.0	8,183.6	6,847.5	46.2	33.2	88.65	-1,512.6	-603.5	1,478.3	1,403.0	75.30	19.632	
9,200.0	6,900.0	8,259.0	6,847.4	47.9	34.5	88.68	-1,580.7	-635.8	1,521.2	1,442.9	78.25	19.440	
9,300.0	6,900.0	8,337.0	6,849.3	49.7	35.7	88.79	-1,650.8	-670.0	1,565.0	1,483.8	81.18	19.278	
9,400.0	6,900.0	8,422.2	6,853.7	51.5	37.1	88.99	-1,727.1	-707.8	1,609.3	1,525.0	84.25	19.102	
9,500.0	6,900.0	8,521.2	6,859.2	53.3	38.9	89.24	-1,815.6	-751.6	1,653.5	1,565.9	87.62	18.872	
9,600.0	6,900.0	8,586.0	6,861.5	55.1	40.0	89.34	-1,873.6	-780.5	1,698.1	1,607.6	90.50	18.764	
9,700.0	6,900.0	8,679.2	6,862.1	56.9	41.6	89.38	-1,956.7	-822.5	1,743.2	1,649.4	93.78	18.588	
9,800.0	6,900.0	8,794.0	6,861.8	58.7	43.6	89.39	-2,059.5	-873.8	1,787.9	1,690.6	97.38	18.360	
9,900.0	6,900.0	8,924.6	6,862.0	60.5	45.8	89.42	-2,177.4	-930.0	1,831.1	1,729.9	101.23	18.088	
10,000.0	6,900.0	9,028.1	6,863.1	62.3	47.7	89.47	-2,271.5	-972.9	1,872.5	1,767.8	104.74	17.878	
10,100.0	6,900.0	9,113.0	6,865.9	64.2	49.1	89.57	-2,348.7	-1,008.3	1,914.2	1,806.2	107.92	17.736	
10,200.0	6,900.0	9,183.3	6,868.9	66.0	50.3	89.67	-2,412.5	-1,037.6	1,956.0	1,845.0	110.92	17.635	
10,300.0	6,900.0	9,276.7	6,872.3	67.9	52.0	89.79	-2,496.9	-1,077.4	1,998.5	1,884.2	114.28	17.488	
10,400.0	6,900.0	9,378.3	6,876.5	69.7	53.8	89.92	-2,589.2	-1,119.7	2,040.2	1,922.5	117.76	17.325	
10,500.0	6,900.0	9,483.3	6,882.2	71.6	55.6	90.10	-2,684.7	-1,163.0	2,081.5	1,960.2	121.30	17.159	
10,600.0	6,900.0	9,556.0	6,885.6	73.4	56.9	90.20	-2,750.7	-1,193.3	2,123.1	1,998.7	124.37	17.071	
10,700.0	6,900.0	9,633.7	6,887.4	75.3	58.3	90.24	-2,821.0	-1,226.3	2,165.6	2,038.1	127.50	16.986	
10,800.0	6,900.0	9,725.2	6,887.9	77.2	59.9	90.26	-2,904.0	-1,264.9	2,207.8	2,076.9	130.88	16.869	
10,900.0	6,900.0	9,823.0	6,888.1	79.0	61.7	90.25	-2,992.6	-1,306.2	2,250.0	2,115.7	134.32	16.751	
11,000.0	6,900.0	9,898.7	6,888.7	80.9	63.0	90.27	-3,061.1	-1,338.4	2,292.6	2,155.1	137.44	16.681	
11,100.0	6,900.0	9,953.4	6,888.4	82.8	64.0	90.26	-3,110.3	-1,362.2	2,336.0	2,195.8	140.23	16.658	
11,200.0	6,900.0	10,026.7	6,886.6	84.6	65.4	90.21	-3,176.0	-1,394.9	2,380.6	2,237.2	143.35	16.607	
11,300.0	6,900.0	10,149.2	6,883.9	86.5	67.6	90.13	-3,285.9	-1,448.6	2,424.3	2,277.1	147.23	16.466	
11,400.0	6,900.0	10,300.2	6,879.4	88.4	70.3	90.01	-3,422.3	-1,513.1	2,467.3	2,315.7	151.59	16.276	
11,500.0	6,900.0	10,353.8	6,879.3	90.3	71.3	90.01	-3,471.1	-1,535.6	2,509.2	2,354.9	154.37	16.255	
11,600.0	6,900.0	10,438.1	6,876.6	92.2	72.9	89.94	-3,547.3	-1,571.3	2,551.7	2,394.0	157.66	16.185	
11,700.0	6,900.0	10,531.5	6,874.9	94.1	74.5	89.90	-3,631.7	-1,611.4	2,594.6	2,433.5	161.06	16.110	
11,800.0	6,900.0	10,615.6	6,874.6	96.0	76.0	89.89	-3,707.7	-1,647.3	2,637.3	2,473.0	164.34	16.048	
11,820.7	6,900.0	10,638.8	6,874.2	96.3	76.5	89.89	-3,728.6	-1,657.2	2,646.2	2,481.1	165.04	16.033	

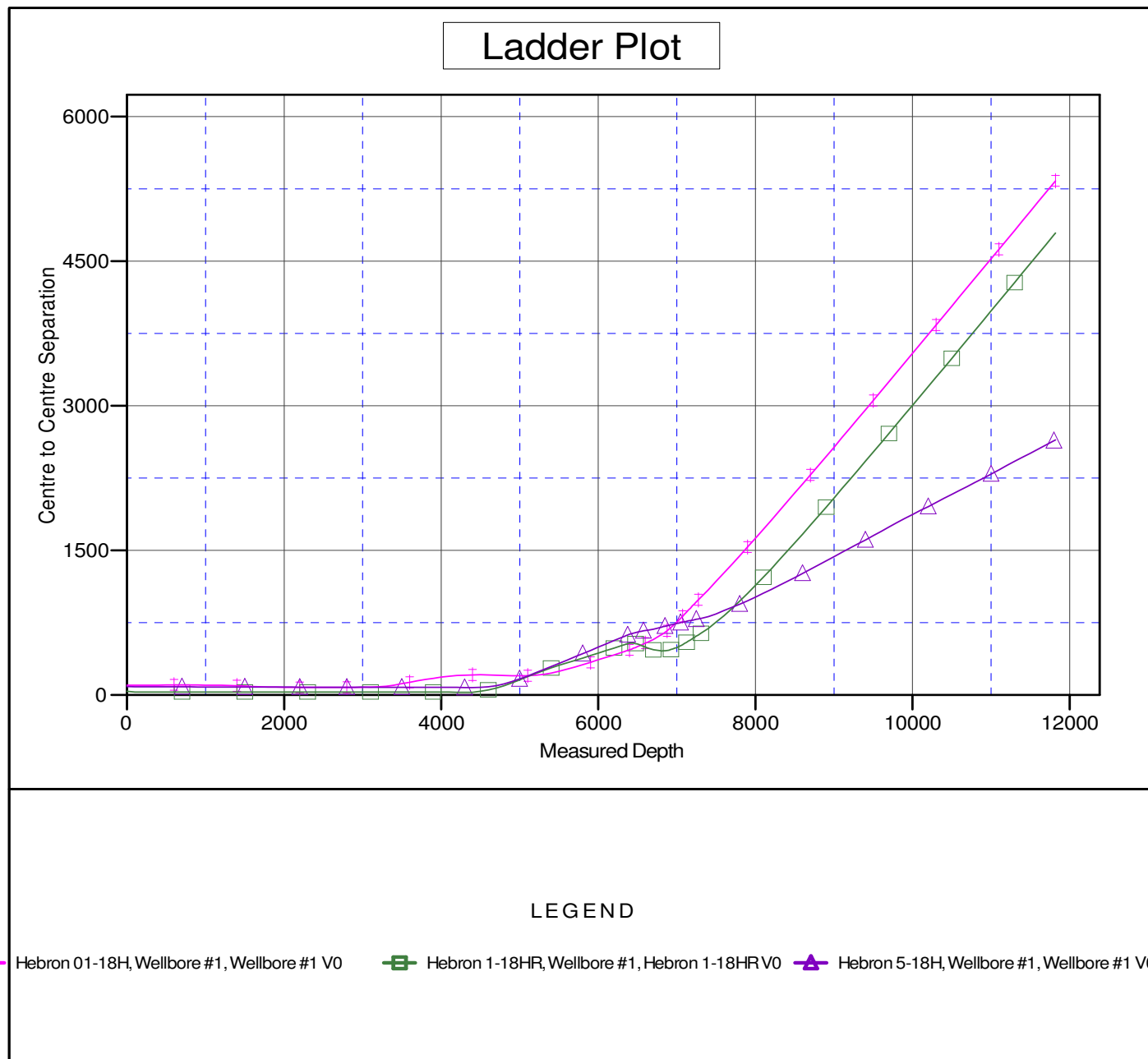
SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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 Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Hebron 0780 2-18H
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: -0.59°



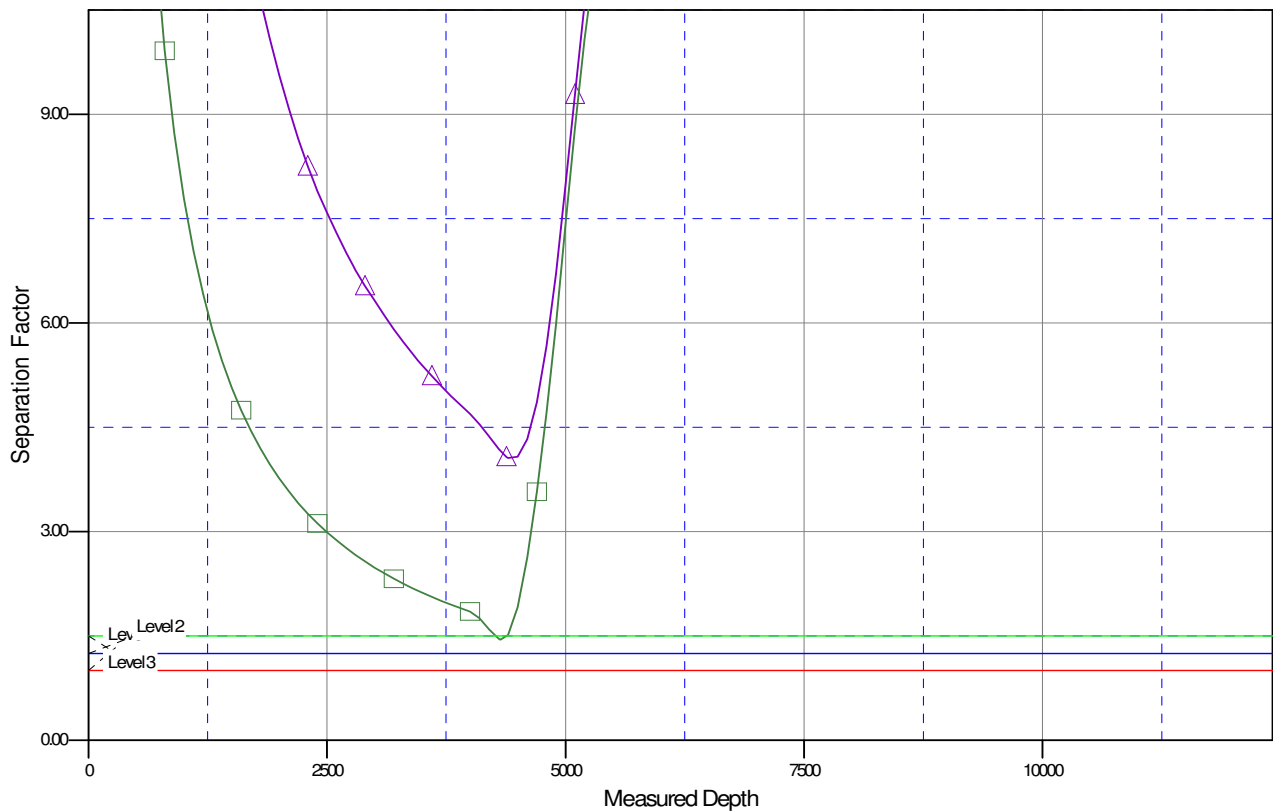
SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 2-18H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S7	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Hebron 0780 2-18H	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 Elev) Coordinates are relative to: Hebron 0780 2-18H
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W Grid Convergence at Surface is: -0.59°

Separation Factor Plot



LEGEND

—○— Hebron 01-18H, Wellbore #1, Wellbore #1 V0
—□— Hebron 1-18HR, Wellbore #1, Hebron 1-18HR V0
—△— Hebron 5-18H, Wellbore #1, Wellbore #1 V0