

# **SandRidge Energy**

**North Park Basin**

**T7N-R80W-S7**

**Marr 0780 3-6H**

**Wellbore #1**

**Design #1**

## **Anticollision Report**

**09 May, 2016**

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	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	5/2/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,335.7	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						
Marr 0780 1-6H - Wellbore #1 - Design #1	2,500.0	2,500.0	30.0	19.0	2.729	CC, ES
Marr 0780 1-6H - Wellbore #1 - Design #1	2,600.0	2,599.5	30.7	19.3	2.692	SF
Marr 0780 2-6H - Wellbore #1 - Design #1	2,900.0	2,900.0	15.0	2.2	1.174	Level 2, CC
Marr 0780 2-6H - Wellbore #1 - Design #1	5,600.0	5,589.1	34.0	1.5	1.047	Level 2, ES, SF
Marr 0780 4-6H - Wellbore #1 - Design #1	3,150.0	3,150.0	15.0	1.1	1.081	Level 2, CC, ES, SF
Marr 0780 5-6H - Wellbore #1 - Design #1	3,150.0	3,151.2	75.0	61.1	5.397	CC, ES
Marr 0780 5-6H - Wellbore #1 - Design #1	3,300.0	3,301.1	77.3	62.8	5.319	SF
Marr 0780 6-6H - Wellbore #1 - Design #1	3,133.0	3,134.1	60.0	46.2	4.342	CC
Marr 0780 6-6H - Wellbore #1 - Design #1	3,150.0	3,151.1	60.0	46.1	4.318	ES
Marr 0780 6-6H - Wellbore #1 - Design #1	3,200.0	3,200.9	60.4	46.3	4.279	SF
Marr 0780 7-6H - Wellbore #1 - Design #1	2,866.3	2,867.3	45.0	32.4	3.567	CC
Marr 0780 7-6H - Wellbore #1 - Design #1	2,900.0	2,901.0	45.0	32.3	3.525	ES
Marr 0780 7-6H - Wellbore #1 - Design #1	3,000.0	3,000.4	45.7	32.5	3.457	SF
Marr 0780 8-6H - Wellbore #1 - Design #1	2,466.3	2,467.3	30.1	19.3	2.779	CC
Marr 0780 8-6H - Wellbore #1 - Design #1	2,500.0	2,501.0	30.1	19.1	2.741	ES
Marr 0780 8-6H - Wellbore #1 - Design #1	2,600.0	2,600.5	30.9	19.5	2.705	SF

Offset Design												T7N-R80W-S7 - Marr 0780 1-6H - 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)					
0.0	0.0	0.0	0.0	0.0	0.0	-155.39	-27.2	-12.5		30.0							
100.0	100.0	100.0	100.0	0.1	0.1	-155.39	-27.2	-12.5		30.0	29.8	0.19	158.698				
200.0	200.0	200.0	200.0	0.3	0.3	-155.39	-27.2	-12.5		30.0	29.3	0.64	46.939				
300.0	300.0	300.0	300.0	0.5	0.5	-155.39	-27.2	-12.5		30.0	28.9	1.09	27.543				
400.0	400.0	400.0	400.0	0.8	0.8	-155.39	-27.2	-12.5		30.0	28.4	1.54	19.489				
500.0	500.0	500.0	500.0	1.0	1.0	-155.39	-27.2	-12.5		30.0	28.0	1.99	15.080				
600.0	600.0	600.0	600.0	1.2	1.2	-155.39	-27.2	-12.5		30.0	27.5	2.44	12.298				
700.0	700.0	700.0	700.0	1.4	1.4	-155.39	-27.2	-12.5		30.0	27.1	2.89	10.382				
800.0	800.0	800.0	800.0	1.7	1.7	-155.39	-27.2	-12.5		30.0	26.6	3.34	8.983				
900.0	900.0	900.0	900.0	1.9	1.9	-155.39	-27.2	-12.5		30.0	26.2	3.79	7.916				
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-155.39	-27.2	-12.5		30.0	25.7	4.23	7.076				
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	-155.39	-27.2	-12.5		30.0	25.3	4.68	6.397				

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 1-6H - 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		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-155.39	-27.2	-12.5	30.0	24.8	5.13	5.837		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-155.39	-27.2	-12.5	30.0	24.4	5.58	5.367		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-155.39	-27.2	-12.5	30.0	23.9	6.03	4.967		
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.2	-155.39	-27.2	-12.5	30.0	23.5	6.48	4.622		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-155.39	-27.2	-12.5	30.0	23.0	6.93	4.323		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-155.39	-27.2	-12.5	30.0	22.6	7.38	4.059		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-155.39	-27.2	-12.5	30.0	22.1	7.83	3.826		
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.1	-155.39	-27.2	-12.5	30.0	21.7	8.28	3.619		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-155.39	-27.2	-12.5	30.0	21.2	8.73	3.432		
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-155.39	-27.2	-12.5	30.0	20.8	9.18	3.264		
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-155.39	-27.2	-12.5	30.0	20.3	9.63	3.112		
2,300.0	2,300.0	2,300.0	2,300.0	5.0	5.0	-155.39	-27.2	-12.5	30.0	19.9	10.08	2.973		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-155.39	-27.2	-12.5	30.0	19.4	10.53	2.846		
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-155.39	-27.2	-12.5	30.0	19.0	10.98	2.729 CC, ES		
2,600.0	2,600.0	2,599.5	2,599.5	5.7	5.7	-152.45	-27.2	-14.2	30.7	19.3	11.41	2.692 SF		
2,700.0	2,700.0	2,698.8	2,698.7	5.9	5.9	-144.58	-27.2	-19.4	33.5	21.6	11.84	2.826		
2,800.0	2,800.0	2,797.6	2,797.1	6.2	6.1	-134.29	-27.2	-27.9	39.1	26.8	12.28	3.185		
2,900.0	2,900.0	2,895.7	2,894.5	6.4	6.4	-124.41	-27.2	-39.8	48.5	35.8	12.76	3.804		
3,000.0	3,000.0	2,992.9	2,990.5	6.6	6.7	-116.44	-27.2	-54.8	61.9	48.6	13.27	4.666		
3,100.0	3,100.0	3,089.0	3,084.8	6.8	7.0	-110.51	-27.2	-72.8	79.2	65.4	13.84	5.724		
3,150.0	3,150.0	3,136.5	3,131.3	6.9	7.2	-108.19	-27.2	-82.9	89.2	75.1	14.15	6.307		
3,200.0	3,200.0	3,183.8	3,177.3	7.1	7.4	-6.75	-27.2	-93.7	99.8	85.8	13.98	7.135		
3,300.0	3,299.9	3,277.8	3,268.3	7.2	7.9	-3.67	-27.2	-117.4	120.8	106.5	14.37	8.412		
3,400.0	3,399.7	3,371.2	3,357.9	7.4	8.5	-1.32	-27.2	-143.9	141.9	127.2	14.74	9.625		
3,500.0	3,499.1	3,464.0	3,445.9	7.7	9.1	0.57	-27.2	-173.2	162.9	147.8	15.11	10.778		
3,600.0	3,598.2	3,556.2	3,532.4	7.9	9.9	2.18	-27.2	-205.0	183.7	168.2	15.48	11.868		
3,700.0	3,696.6	3,647.7	3,617.3	8.1	10.8	3.58	-27.2	-239.3	204.4	188.5	15.84	12.902		
3,800.0	3,794.4	3,738.7	3,700.4	8.4	11.8	4.83	-27.2	-276.1	224.9	208.7	16.20	13.879		
3,900.0	3,891.5	3,829.1	3,781.9	8.7	12.8	5.97	-27.2	-315.3	245.1	228.6	16.56	14.800		
3,960.1	3,949.3	3,884.1	3,830.9	8.9	13.6	6.62	-27.2	-340.4	257.2	240.4	16.79	15.321		
4,000.0	3,987.7	3,923.2	3,865.6	9.0	14.1	7.08	-27.2	-358.4	265.0	248.1	16.98	15.610		
4,100.0	4,083.7	4,021.1	3,952.5	9.4	15.4	8.13	-27.2	-403.5	284.8	267.3	17.47	16.300		
4,200.0	4,179.7	4,119.0	4,039.4	9.8	16.8	9.03	-27.2	-448.6	304.6	286.6	17.98	16.938		
4,300.0	4,275.7	4,217.0	4,126.3	10.2	18.2	9.83	-27.2	-493.7	324.4	305.9	18.51	17.525		
4,400.0	4,371.8	4,314.9	4,213.2	10.6	19.6	10.54	-27.2	-538.8	344.4	325.3	19.06	18.065		
4,500.0	4,467.8	4,412.8	4,300.1	11.0	21.1	11.16	-27.2	-583.9	364.3	344.7	19.63	18.559		
4,600.0	4,563.8	4,510.7	4,387.0	11.5	22.5	11.73	-27.2	-629.0	384.4	364.1	20.22	19.011		
4,700.0	4,659.9	4,608.6	4,474.0	12.0	24.0	12.23	-27.2	-674.1	404.4	383.6	20.82	19.424		
4,800.0	4,755.9	4,706.5	4,560.9	12.4	25.4	12.69	-27.2	-719.2	424.5	403.0	21.44	19.800		
4,900.0	4,851.9	4,804.4	4,647.8	12.9	26.9	13.11	-27.2	-764.3	444.6	422.5	22.07	20.142		
5,000.0	4,948.0	4,902.3	4,734.7	13.4	28.4	13.49	-27.2	-809.4	464.7	442.0	22.72	20.454		
5,100.0	5,044.0	5,000.2	4,821.6	13.9	29.9	13.84	-27.2	-854.5	484.8	461.4	23.38	20.737		
5,200.0	5,140.0	5,098.2	4,908.5	14.5	31.4	14.16	-27.2	-899.6	504.9	480.9	24.05	20.995		
5,300.0	5,236.0	5,196.1	4,995.4	15.0	32.9	14.46	-27.2	-944.7	525.1	500.4	24.73	21.230		
5,400.0	5,332.1	5,294.0	5,082.3	15.5	34.4	14.74	-27.2	-989.8	545.3	519.9	25.43	21.444		
5,500.0	5,428.1	5,391.9	5,169.2	16.0	35.9	14.99	-27.2	-1,034.9	565.5	539.3	26.13	21.638		
5,600.0	5,524.1	5,489.8	5,256.1	16.6	37.4	15.23	-27.2	-1,080.0	585.7	558.8	26.85	21.816		
5,700.0	5,620.2	5,587.7	5,343.0	17.1	38.9	15.45	-27.2	-1,125.1	605.9	578.3	27.57	21.977		
5,732.4	5,651.3	5,619.5	5,371.2	17.3	39.4	15.52	-27.2	-1,139.7	612.4	584.6	27.80	22.027		
5,750.0	5,668.2	5,636.7	5,386.5	17.4	39.6	10.98	-27.2	-1,147.7	615.9	587.9	27.99	22.003		
5,800.0	5,716.1	5,685.8	5,430.0	17.6	40.4	-1.75	-27.2	-1,170.3	625.3	596.9	28.45	21.978		
5,850.0	5,763.8	5,734.7	5,473.5	17.9	41.2	-13.22	-27.2	-1,192.8	633.9	605.1	28.78	22.027		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 1-6H - 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		
5,900.0	5,810.9	5,783.4	5,516.7	18.1	41.9	-22.90	-27.2	-1,215.2	641.7	612.7	28.97	22.150		
5,950.0	5,857.3	5,831.5	5,559.4	18.4	42.7	-30.85	-27.2	-1,237.4	648.7	619.7	29.04	22.336		
6,000.0	5,902.8	5,878.8	5,601.4	18.6	43.4	-37.43	-27.2	-1,259.2	655.2	626.2	29.04	22.560		
6,050.0	5,947.0	5,925.1	5,642.5	18.9	44.1	-42.97	-27.2	-1,280.5	661.3	632.3	29.02	22.789		
6,100.0	5,989.8	5,970.2	5,682.5	19.1	44.8	-47.75	-27.2	-1,301.3	667.2	638.2	29.03	22.985		
6,150.0	6,031.0	6,013.8	5,721.2	19.4	45.5	-51.95	-27.2	-1,321.4	673.2	644.1	29.13	23.115		
6,200.0	6,070.4	6,047.0	5,750.7	19.6	46.0	-55.27	-27.2	-1,336.7	679.7	650.4	29.31	23.185		
6,250.0	6,107.8	6,067.5	5,768.6	19.9	46.3	-57.54	-27.2	-1,346.6	687.7	658.2	29.54	23.280		
6,300.0	6,143.0	6,086.8	5,785.2	20.2	46.7	-59.34	-27.2	-1,356.4	697.6	667.8	29.81	23.399		
6,350.0	6,175.8	6,100.0	5,796.4	20.5	46.9	-60.41	-27.2	-1,363.4	709.5	679.5	30.09	23.580		
6,400.0	6,206.1	6,121.5	5,814.3	20.8	47.3	-61.63	-27.2	-1,375.2	723.4	692.9	30.49	23.728		
6,450.0	6,233.8	6,136.8	5,826.9	21.1	47.6	-62.18	-27.2	-1,383.9	739.2	708.3	30.87	23.947		
6,472.1	6,245.1	6,150.0	5,837.6	21.3	47.9	-62.75	-27.2	-1,391.7	746.8	715.7	31.12	23.995		
6,500.0	6,259.0	6,150.0	5,837.6	21.5	47.9	-62.75	-27.2	-1,391.7	757.0	725.6	31.33	24.158		
6,600.0	6,309.0	6,178.5	5,860.3	22.3	48.5	-64.59	-27.2	-1,409.0	799.3	766.7	32.56	24.552		
6,622.1	6,320.1	6,184.6	5,865.0	22.5	48.6	-64.97	-27.2	-1,412.8	809.7	776.9	32.85	24.651		
6,650.0	6,333.6	6,200.0	5,876.8	22.7	48.9	-65.32	-27.2	-1,422.7	823.7	790.7	33.01	24.952		
6,700.0	6,355.3	6,200.0	5,876.8	23.2	48.9	-63.59	-27.2	-1,422.7	850.4	817.4	33.03	25.745		
6,750.0	6,373.7	6,213.2	5,886.8	23.6	49.2	-62.09	-27.2	-1,431.3	879.5	846.2	33.32	26.400		
6,800.0	6,388.7	6,220.7	5,892.4	24.0	49.4	-59.56	-27.2	-1,436.4	910.6	877.0	33.55	27.140		
6,850.0	6,400.1	6,226.2	5,896.5	24.5	49.5	-56.29	-27.2	-1,440.1	943.3	909.7	33.68	28.012		
6,900.0	6,407.9	6,229.6	5,899.0	24.9	49.6	-52.33	-27.2	-1,442.4	977.4	943.8	33.58	29.107		
6,913.9	6,409.5	6,230.2	5,899.4	25.1	49.6	-51.13	-27.2	-1,442.8	987.0	953.5	33.50	29.461		
7,000.0	6,418.0	6,233.2	5,901.6	25.9	49.7	-51.37	-27.2	-1,444.8	1,048.9	1,014.5	34.44	30.457		
7,100.0	6,428.0	6,236.8	5,904.2	26.9	49.8	-51.66	-27.2	-1,447.2	1,124.8	1,089.2	35.58	31.614		
7,200.0	6,437.9	6,250.0	5,913.7	28.1	50.1	-52.72	-27.2	-1,456.4	1,204.2	1,167.2	36.99	32.557		
7,300.0	6,447.8	6,250.0	5,913.7	29.3	50.1	-52.72	-27.2	-1,456.4	1,286.4	1,248.2	38.19	33.681		
7,400.0	6,457.7	8,048.3	6,492.5	30.6	76.5	-91.51	1,094.1	-2,212.1	1,320.4	1,255.9	64.46	20.483		
7,500.0	6,467.7	8,148.3	6,502.4	32.0	77.3	-91.51	1,193.6	-2,212.1	1,320.4	1,251.8	68.59	19.250		
7,600.0	6,477.6	8,248.3	6,512.3	33.5	78.2	-91.51	1,293.1	-2,212.1	1,320.4	1,247.6	72.82	18.131		
7,700.0	6,487.5	8,348.3	6,522.3	35.0	79.2	-91.51	1,392.6	-2,212.1	1,320.4	1,243.2	77.14	17.116		
7,800.0	6,497.5	8,448.3	6,532.2	36.5	80.3	-91.51	1,492.1	-2,212.1	1,320.4	1,238.8	81.53	16.195		
7,900.0	6,507.4	8,548.3	6,542.1	38.0	81.5	-91.51	1,591.6	-2,212.1	1,320.4	1,234.4	85.98	15.357		
8,000.0	6,517.3	8,648.3	6,552.0	39.6	82.7	-91.51	1,691.1	-2,212.0	1,320.4	1,229.9	90.48	14.593		
8,100.0	6,527.3	8,748.3	6,562.0	41.3	84.1	-91.51	1,790.6	-2,212.0	1,320.4	1,225.3	95.02	13.895		
8,200.0	6,537.2	8,848.3	6,571.9	42.9	85.6	-91.51	1,890.1	-2,212.0	1,320.4	1,220.7	99.61	13.256		
8,300.0	6,547.1	8,948.3	6,581.8	44.6	87.1	-91.51	1,989.6	-2,212.0	1,320.4	1,216.1	104.22	12.669		
8,400.0	6,557.1	9,048.3	6,591.8	46.3	88.8	-91.51	2,089.1	-2,212.0	1,320.3	1,211.5	108.87	12.128		
8,500.0	6,567.0	9,148.3	6,601.7	48.0	90.5	-91.51	2,188.6	-2,212.0	1,320.3	1,206.8	113.53	11.629		
8,600.0	6,576.9	9,248.3	6,611.6	49.7	92.4	-91.51	2,288.2	-2,212.0	1,320.3	1,202.1	118.23	11.168		
8,700.0	6,586.9	9,348.3	6,621.6	51.5	94.3	-91.51	2,387.7	-2,212.0	1,320.3	1,197.4	122.94	10.740		
8,800.0	6,596.8	9,448.3	6,631.5	53.2	96.2	-91.51	2,487.2	-2,212.0	1,320.3	1,192.7	127.67	10.342		
8,900.0	6,606.7	9,548.3	6,641.4	55.0	98.3	-91.51	2,586.7	-2,212.0	1,320.3	1,187.9	132.41	9.971		
9,000.0	6,616.7	9,648.3	6,651.4	56.8	100.4	-91.51	2,686.2	-2,212.0	1,320.3	1,183.1	137.17	9.625		
9,100.0	6,626.6	9,748.3	6,661.3	58.5	102.6	-91.51	2,785.7	-2,212.0	1,320.3	1,178.4	141.94	9.302		
9,200.0	6,636.5	9,848.3	6,671.2	60.3	104.8	-91.51	2,885.2	-2,212.0	1,320.3	1,173.6	146.72	8.999		
9,300.0	6,646.5	9,948.3	6,681.2	62.1	107.1	-91.51	2,984.7	-2,212.0	1,320.3	1,168.8	151.52	8.714		
9,400.0	6,656.4	10,048.3	6,691.1	63.9	109.4	-91.51	3,084.2	-2,212.0	1,320.3	1,164.0	156.32	8.446		
9,500.0	6,666.3	10,148.3	6,701.0	65.7	111.8	-91.51	3,183.7	-2,212.0	1,320.3	1,159.2	161.13	8.194		
9,600.0	6,676.3	10,248.3	6,711.0	67.6	114.2	-91.51	3,283.2	-2,212.0	1,320.3	1,154.3	165.95	7.956		
9,700.0	6,686.2	10,348.3	6,720.9	69.4	116.7	-91.51	3,382.7	-2,212.0	1,320.3	1,149.5	170.77	7.731		
9,800.0	6,696.1	10,448.3	6,730.8	71.2	119.2	-91.51	3,482.2	-2,212.0	1,320.3	1,144.7	175.61	7.518		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 1-6H - 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		
9,900.0	6,706.0	10,548.3	6,740.8	73.1	121.7	-91.51	3,581.7	-2,212.0	1,320.3	1,139.8	180.45	7.317		
10,000.0	6,716.0	10,648.3	6,750.7	74.9	124.2	-91.51	3,681.2	-2,212.0	1,320.3	1,135.0	185.29	7.125		
10,100.0	6,725.9	10,748.3	6,760.6	76.7	126.8	-91.51	3,780.7	-2,212.0	1,320.3	1,130.1	190.14	6.944		
10,200.0	6,735.8	10,848.3	6,770.6	78.6	129.4	-91.51	3,880.2	-2,212.0	1,320.3	1,125.3	194.99	6.771		
10,300.0	6,745.8	10,948.3	6,780.5	80.4	132.1	-91.51	3,979.7	-2,212.0	1,320.3	1,120.4	199.85	6.606		
10,400.0	6,755.7	11,048.3	6,790.4	82.3	134.7	-91.51	4,079.3	-2,212.0	1,320.3	1,115.5	204.71	6.449		
10,500.0	6,765.6	11,148.3	6,800.3	84.1	137.4	-91.51	4,178.8	-2,211.9	1,320.2	1,110.7	209.58	6.300		
10,600.0	6,775.6	11,248.3	6,810.3	86.0	140.1	-91.51	4,278.3	-2,211.9	1,320.2	1,105.8	214.45	6.156		
10,700.0	6,785.5	11,348.3	6,820.2	87.9	142.8	-91.51	4,377.8	-2,211.9	1,320.2	1,100.9	219.32	6.020		
10,800.0	6,795.4	11,448.3	6,830.1	89.7	145.5	-91.51	4,477.3	-2,211.9	1,320.2	1,096.0	224.20	5.889		
10,900.0	6,805.4	11,548.3	6,840.1	91.6	148.2	-91.51	4,576.8	-2,211.9	1,320.2	1,091.2	229.08	5.763		
11,000.0	6,815.3	11,648.3	6,850.0	93.5	151.0	-91.51	4,676.3	-2,211.9	1,320.2	1,086.3	233.96	5.643		
11,100.0	6,825.2	11,748.3	6,859.9	95.3	153.8	-91.51	4,775.8	-2,211.9	1,320.2	1,081.4	238.84	5.528		
11,200.0	6,835.2	11,848.3	6,869.9	97.2	156.5	-91.51	4,875.3	-2,211.9	1,320.2	1,076.5	243.73	5.417		
11,300.0	6,845.1	11,948.3	6,879.8	99.1	159.3	-91.51	4,974.8	-2,211.9	1,320.2	1,071.6	248.62	5.310		
11,400.0	6,855.0	12,048.3	6,889.7	101.0	162.1	-91.51	5,074.3	-2,211.9	1,320.2	1,066.7	253.51	5.208		
11,500.0	6,865.0	12,148.3	6,899.7	102.8	164.9	-91.51	5,173.8	-2,211.9	1,320.2	1,061.8	258.40	5.109		
11,600.0	6,874.9	12,248.3	6,909.6	104.7	167.8	-91.51	5,273.3	-2,211.9	1,320.2	1,056.9	263.29	5.014		
11,700.0	6,884.8	12,348.3	6,919.5	106.6	170.6	-91.51	5,372.8	-2,211.9	1,320.2	1,052.0	268.19	4.923		
11,800.0	6,894.8	12,448.3	6,929.5	108.5	173.4	-91.51	5,472.3	-2,211.9	1,320.2	1,047.1	273.09	4.834		
11,900.0	6,904.7	12,548.3	6,939.4	110.4	176.3	-91.51	5,571.8	-2,211.9	1,320.2	1,042.2	277.99	4.749		
12,000.0	6,914.6	12,648.3	6,949.3	112.3	179.1	-91.51	5,671.3	-2,211.9	1,320.2	1,037.3	282.89	4.667		
12,100.0	6,924.6	12,748.3	6,959.3	114.1	182.0	-91.51	5,770.8	-2,211.9	1,320.2	1,032.4	287.79	4.587		
12,200.0	6,934.5	12,848.3	6,969.2	116.0	184.8	-91.51	5,870.4	-2,211.9	1,320.2	1,027.5	292.70	4.510		
12,300.0	6,944.4	12,948.3	6,979.1	117.9	187.7	-91.51	5,969.9	-2,211.9	1,320.2	1,022.6	297.60	4.436		
12,336.4	6,948.0	12,984.7	6,982.7	118.5	188.7	-91.51	6,006.1	-2,211.9	1,320.2	1,020.9	299.25	4.412		
12,336.7	6,948.1	12,985.1	6,982.8	118.5	188.7	-91.51	6,006.4	-2,211.9	1,320.2	1,020.9	299.27	4.411		

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 2-6H - 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	-155.16	-13.6	-6.3	15.0					
100.0	100.0	100.0	100.0	0.1	0.1	-155.16	-13.6	-6.3	15.0	14.8	0.19	79.434		
200.0	200.0	200.0	200.0	0.3	0.3	-155.16	-13.6	-6.3	15.0	14.4	0.64	23.495		
300.0	300.0	300.0	300.0	0.5	0.5	-155.16	-13.6	-6.3	15.0	13.9	1.09	13.786		
400.0	400.0	400.0	400.0	0.8	0.8	-155.16	-13.6	-6.3	15.0	13.5	1.54	9.755		
500.0	500.0	500.0	500.0	1.0	1.0	-155.16	-13.6	-6.3	15.0	13.0	1.99	7.548		
600.0	600.0	600.0	600.0	1.2	1.2	-155.16	-13.6	-6.3	15.0	12.6	2.44	6.155		
700.0	700.0	700.0	700.0	1.4	1.4	-155.16	-13.6	-6.3	15.0	12.1	2.89	5.197		
800.0	800.0	800.0	800.0	1.7	1.7	-155.16	-13.6	-6.3	15.0	11.7	3.34	4.496		
900.0	900.0	900.0	900.0	1.9	1.9	-155.16	-13.6	-6.3	15.0	11.2	3.79	3.962		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-155.16	-13.6	-6.3	15.0	10.8	4.23	3.542		
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	-155.16	-13.6	-6.3	15.0	10.3	4.68	3.202		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-155.16	-13.6	-6.3	15.0	9.9	5.13	2.921		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-155.16	-13.6	-6.3	15.0	9.4	5.58	2.686		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-155.16	-13.6	-6.3	15.0	9.0	6.03	2.486		
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.2	-155.16	-13.6	-6.3	15.0	8.5	6.48	2.314		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-155.16	-13.6	-6.3	15.0	8.1	6.93	2.164		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-155.16	-13.6	-6.3	15.0	7.6	7.38	2.032		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-155.16	-13.6	-6.3	15.0	7.2	7.83	1.915	Level 4	
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.1	-155.16	-13.6	-6.3	15.0	6.7	8.28	1.811	Level 4	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-155.16	-13.6	-6.3	15.0	6.3	8.73	1.718	Level 4	
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-155.16	-13.6	-6.3	15.0	5.8	9.18	1.634	Level 4	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-155.16	-13.6	-6.3	15.0	5.4	9.63	1.558	Level 4	
2,300.0	2,300.0	2,300.0	2,300.0	5.0	5.0	-155.16	-13.6	-6.3	15.0	4.9	10.08	1.488	Level 3	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-155.16	-13.6	-6.3	15.0	4.5	10.53	1.425	Level 3	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-155.16	-13.6	-6.3	15.0	4.0	10.98	1.366	Level 3	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-155.16	-13.6	-6.3	15.0	3.6	11.43	1.312	Level 3	
2,700.0	2,700.0	2,700.0	2,700.0	5.9	5.9	-155.16	-13.6	-6.3	15.0	3.1	11.88	1.263	Level 3	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-155.16	-13.6	-6.3	15.0	2.7	12.33	1.217	Level 2	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-155.16	-13.6	-6.3	15.0	2.2	12.78	1.174	Level 2, CC	
3,000.0	3,000.0	2,999.7	2,999.7	6.6	6.6	-149.74	-13.8	-8.0	15.9	2.7	13.21	1.206	Level 2	
3,100.0	3,100.0	3,099.2	3,099.0	6.8	6.8	-137.12	-14.2	-13.2	19.4	5.8	13.63	1.424	Level 3	
3,150.0	3,150.0	3,148.7	3,148.4	6.9	6.9	-130.47	-14.5	-17.0	22.5	8.6	13.84	1.623	Level 4	
3,200.0	3,200.0	3,198.2	3,197.6	7.1	7.0	-25.42	-15.0	-21.7	26.1	12.1	14.04	1.859	Level 4	
3,300.0	3,299.9	3,296.9	3,295.6	7.2	7.2	-17.71	-16.0	-33.6	33.8	19.3	14.42	2.342		
3,400.0	3,399.7	3,395.3	3,392.8	7.4	7.4	-12.57	-17.3	-48.8	41.7	26.9	14.79	2.819		
3,500.0	3,499.1	3,493.4	3,489.2	7.7	7.7	-8.81	-18.9	-67.3	49.8	34.6	15.15	3.283		
3,600.0	3,598.2	3,591.2	3,584.5	7.9	8.0	-5.86	-20.8	-89.0	57.8	42.3	15.51	3.731		
3,700.0	3,696.6	3,690.5	3,680.8	8.1	8.3	-3.52	-22.9	-113.2	64.9	49.0	15.86	4.093		
3,800.0	3,794.4	3,790.5	3,777.7	8.4	8.6	-1.72	-25.0	-137.7	68.6	52.4	16.20	4.235		
3,900.0	3,891.5	3,890.4	3,874.6	8.7	9.0	-0.11	-27.2	-162.1	68.9	52.3	16.54	4.164		
3,960.1	3,949.3	3,950.5	3,932.8	8.9	9.2	0.87	-28.4	-176.8	67.4	50.7	16.75	4.025		
4,000.0	3,987.7	3,990.4	3,971.5	9.0	9.3	1.55	-29.3	-186.6	66.0	49.1	16.92	3.901		
4,100.0	4,083.7	4,090.3	4,068.3	9.4	9.7	3.40	-31.4	-211.1	62.6	45.2	17.37	3.603		
4,200.0	4,179.7	4,190.2	4,165.2	9.8	10.1	5.46	-33.5	-235.5	59.2	41.4	17.83	3.322		
4,300.0	4,275.7	4,290.1	4,262.0	10.2	10.5	7.77	-35.7	-260.0	55.9	37.6	18.31	3.056		
4,400.0	4,371.8	4,390.0	4,358.9	10.6	11.0	10.36	-37.8	-284.4	52.8	33.9	18.81	2.804		
4,500.0	4,467.8	4,490.0	4,455.7	11.0	11.4	13.27	-39.9	-308.9	49.7	30.3	19.36	2.567		
4,600.0	4,563.8	4,589.9	4,552.6	11.5	11.8	16.55	-42.1	-333.4	46.8	26.8	19.96	2.344		
4,700.0	4,659.9	4,689.8	4,649.5	12.0	12.3	20.26	-44.2	-357.8	44.1	23.4	20.64	2.135		
4,800.0	4,755.9	4,789.7	4,746.3	12.4	12.7	24.43	-46.3	-382.3	41.5	20.1	21.42	1.939	Level 4	
4,900.0	4,851.9	4,889.6	4,843.2	12.9	13.2	29.12	-48.4	-406.7	39.2	16.9	22.33	1.758	Level 4	

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 2-6H - 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		
5,000.0	4,948.0	4,989.6	4,940.0	13.4	13.7	34.35	-50.6	-431.2	37.3	13.9	23.40	1.592	Level 4	
5,100.0	5,044.0	5,089.5	5,036.9	13.9	14.1	40.11	-52.7	-455.7	35.6	11.0	24.65	1.445	Level 3	
5,200.0	5,140.0	5,189.4	5,133.7	14.5	14.6	46.35	-54.8	-480.1	34.4	8.3	26.07	1.318	Level 3	
5,300.0	5,236.0	5,289.3	5,230.6	15.0	15.1	52.98	-56.9	-504.6	33.6	5.9	27.62	1.215	Level 2	
5,400.0	5,332.1	5,389.2	5,327.4	15.5	15.6	59.85	-59.1	-529.0	33.2	3.9	29.26	1.135	Level 2	
5,421.7	5,352.9	5,410.9	5,348.5	15.6	15.7	61.35	-59.5	-534.3	33.2	3.6	29.61	1.121	Level 2	
5,500.0	5,428.1	5,489.2	5,424.3	16.0	16.1	66.75	-61.2	-553.5	33.3	2.5	30.89	1.079	Level 2	
5,600.0	5,524.1	5,589.1	5,521.2	16.6	16.6	73.51	-63.3	-578.0	34.0	1.5	32.44	1.047	Level 2, ES, SF	
5,700.0	5,620.2	5,687.6	5,615.2	17.1	17.1	72.21	-65.8	-606.9	36.6	3.2	33.39	1.097	Level 2	
5,732.4	5,651.3	5,719.1	5,644.4	17.3	17.3	67.96	-66.9	-618.8	38.7	5.3	33.36	1.160	Level 2	
5,750.0	5,668.2	5,736.1	5,659.9	17.4	17.5	60.22	-67.5	-625.7	40.0	6.8	33.22	1.204	Level 2	
5,800.0	5,716.1	5,783.6	5,702.3	17.6	17.9	35.94	-69.3	-647.0	43.8	11.6	32.11	1.363	Level 3	
5,850.0	5,763.8	5,829.6	5,741.9	17.9	18.3	10.78	-71.3	-670.3	49.3	19.2	30.15	1.636	Level 4	
5,900.0	5,810.9	5,873.6	5,778.3	18.1	18.7	-12.11	-73.5	-694.9	58.8	30.6	28.19	2.085		
5,950.0	5,857.3	5,915.2	5,811.3	18.4	19.2	-30.71	-75.7	-720.1	73.2	46.1	27.09	2.701		
6,000.0	5,902.8	5,954.1	5,840.8	18.6	19.7	-44.74	-77.9	-745.5	92.5	65.6	26.88	3.441		
6,050.0	5,947.0	5,990.4	5,866.9	18.9	20.2	-54.89	-80.1	-770.5	116.2	89.0	27.15	4.279		
6,100.0	5,989.8	6,023.8	5,889.9	19.1	20.6	-62.03	-82.2	-794.7	143.6	116.0	27.58	5.207		
6,150.0	6,031.0	6,050.0	5,907.1	19.4	21.0	-66.16	-83.9	-814.3	174.3	146.3	27.94	6.238		
6,200.0	6,070.4	6,082.3	5,927.3	19.6	21.5	-69.93	-86.1	-839.5	207.5	179.2	28.38	7.313		
6,250.0	6,107.8	6,107.6	5,942.3	19.9	21.9	-71.52	-87.8	-859.7	243.2	214.5	28.69	8.477		
6,300.0	6,143.0	6,130.4	5,955.2	20.2	22.3	-71.88	-89.4	-878.4	280.7	251.8	28.94	9.700		
6,350.0	6,175.8	6,150.0	5,965.8	20.5	22.6	-71.06	-90.9	-894.9	319.9	290.8	29.15	10.975		
6,400.0	6,206.1	6,168.9	5,975.6	20.8	23.0	-69.49	-92.3	-911.0	360.5	331.1	29.35	12.281		
6,450.0	6,233.8	6,189.0	5,985.7	21.1	23.3	-67.60	-93.8	-928.3	402.1	372.5	29.57	13.596		
6,472.1	6,245.1	6,198.2	5,990.3	21.3	23.5	-66.71	-94.5	-936.2	420.7	391.0	29.68	14.175		
6,500.0	6,259.0	6,209.6	5,996.0	21.5	23.7	-68.53	-95.3	-946.1	444.4	414.3	30.09	14.765		
6,600.0	6,309.0	6,250.4	6,016.4	22.3	24.4	-74.15	-98.4	-981.3	530.5	498.9	31.67	16.752		
6,622.1	6,320.1	6,259.4	6,020.9	22.5	24.6	-75.23	-99.1	-989.1	549.8	517.7	32.03	17.164		
6,650.0	6,333.6	6,270.3	6,026.3	22.7	24.8	-72.66	-99.9	-998.4	574.3	542.4	31.93	17.985		
6,700.0	6,355.3	6,287.0	6,034.7	23.2	25.1	-66.78	-101.1	-1,012.9	619.0	587.3	31.74	19.500		
6,750.0	6,373.7	6,300.1	6,041.2	23.6	25.4	-59.22	-102.1	-1,024.2	664.5	633.1	31.36	21.190		
6,800.0	6,388.7	7,303.0	6,412.1	24.0	37.7	-90.37	499.9	-1,552.4	666.6	626.0	40.63	16.407		
6,850.0	6,400.1	7,352.3	6,417.0	24.5	38.0	-90.80	549.0	-1,552.4	662.4	621.9	40.49	16.357		
6,900.0	6,407.9	7,402.2	6,421.9	24.9	38.2	-91.13	598.6	-1,552.4	660.5	620.2	40.34	16.372		
6,913.9	6,409.5	7,416.1	6,423.3	25.1	38.3	-91.21	612.4	-1,552.4	660.4	620.1	40.31	16.382		
7,000.0	6,418.0	7,502.2	6,431.9	25.9	38.8	-91.21	698.1	-1,552.4	660.4	618.0	42.46	15.554		
7,100.0	6,428.0	7,602.2	6,441.8	26.9	39.4	-91.21	797.6	-1,552.4	660.4	615.3	45.11	14.641		
7,200.0	6,437.9	7,702.2	6,451.7	28.1	40.2	-91.21	897.1	-1,552.4	660.4	612.5	47.92	13.783		
7,300.0	6,447.8	7,802.2	6,461.7	29.3	40.9	-91.21	996.7	-1,552.4	660.4	609.5	50.86	12.985		
7,400.0	6,457.7	7,902.2	6,471.6	30.6	41.8	-91.21	1,096.2	-1,552.4	660.4	606.5	53.92	12.248		
7,500.0	6,467.7	8,002.2	6,481.5	32.0	42.7	-91.21	1,195.7	-1,552.4	660.4	603.3	57.07	11.572		
7,600.0	6,477.6	8,102.2	6,491.5	33.5	43.7	-91.21	1,295.2	-1,552.4	660.4	600.1	60.30	10.951		
7,700.0	6,487.5	8,202.2	6,501.4	35.0	44.8	-91.21	1,394.7	-1,552.4	660.4	596.8	63.60	10.383		
7,800.0	6,497.5	8,302.2	6,511.3	36.5	45.9	-91.21	1,494.2	-1,552.4	660.4	593.4	66.96	9.862		
7,900.0	6,507.4	8,402.2	6,521.3	38.0	47.1	-91.21	1,593.7	-1,552.3	660.3	590.0	70.36	9.385		
8,000.0	6,517.3	8,502.2	6,531.2	39.6	48.3	-91.21	1,693.2	-1,552.3	660.3	586.5	73.81	8.946		
8,100.0	6,527.3	8,602.2	6,541.1	41.3	49.5	-91.21	1,792.7	-1,552.3	660.3	583.0	77.30	8.542		
8,200.0	6,537.2	8,702.2	6,551.1	42.9	50.9	-91.21	1,892.2	-1,552.3	660.3	579.5	80.82	8.170		
8,300.0	6,547.1	8,802.2	6,561.0	44.6	52.2	-91.21	1,991.7	-1,552.3	660.3	575.9	84.37	7.827		
8,400.0	6,557.1	8,902.2	6,570.9	46.3	53.6	-91.21	2,091.2	-1,552.3	660.3	572.4	87.94	7.509		
8,500.0	6,567.0	9,002.2	6,580.9	48.0	55.0	-91.21	2,190.7	-1,552.3	660.3	568.8	91.53	7.214		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 2-6H - 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		
8,600.0	6,576.9	9,102.2	6,590.8	49.7	56.5	-91.21	2,290.2	-1,552.3	660.3	565.1	95.15	6.940		
8,700.0	6,586.9	9,202.2	6,600.7	51.5	58.0	-91.21	2,389.7	-1,552.3	660.3	561.5	98.78	6.685		
8,800.0	6,596.8	9,302.2	6,610.7	53.2	59.5	-91.21	2,489.2	-1,552.3	660.3	557.9	102.42	6.447		
8,900.0	6,606.7	9,402.2	6,620.6	55.0	61.0	-91.21	2,588.7	-1,552.3	660.3	554.2	106.08	6.224		
9,000.0	6,616.7	9,502.2	6,630.5	56.8	62.6	-91.21	2,688.2	-1,552.3	660.3	550.5	109.75	6.016		
9,100.0	6,626.6	9,602.2	6,640.5	58.5	64.2	-91.21	2,787.8	-1,552.3	660.3	546.8	113.44	5.820		
9,200.0	6,636.5	9,702.2	6,650.4	60.3	65.8	-91.21	2,887.3	-1,552.2	660.2	543.1	117.13	5.637		
9,300.0	6,646.5	9,802.2	6,660.3	62.1	67.4	-91.21	2,986.8	-1,552.2	660.2	539.4	120.83	5.464		
9,400.0	6,656.4	9,902.2	6,670.2	63.9	69.1	-91.21	3,086.3	-1,552.2	660.2	535.7	124.55	5.301		
9,500.0	6,666.3	10,002.2	6,680.2	65.7	70.7	-91.21	3,185.8	-1,552.2	660.2	532.0	128.26	5.147		
9,600.0	6,676.3	10,102.2	6,690.1	67.6	72.4	-91.21	3,285.3	-1,552.2	660.2	528.2	131.99	5.002		
9,700.0	6,686.2	10,202.2	6,700.0	69.4	74.1	-91.21	3,384.8	-1,552.2	660.2	524.5	135.72	4.864		
9,800.0	6,696.1	10,302.2	6,710.0	71.2	75.8	-91.21	3,484.3	-1,552.2	660.2	520.7	139.46	4.734		
9,900.0	6,706.0	10,402.2	6,719.9	73.1	77.5	-91.21	3,583.8	-1,552.2	660.2	517.0	143.20	4.610		
10,000.0	6,716.0	10,502.2	6,729.8	74.9	79.2	-91.21	3,683.3	-1,552.2	660.2	513.2	146.95	4.492		
10,100.0	6,725.9	10,602.2	6,739.8	76.7	81.0	-91.21	3,782.8	-1,552.2	660.2	509.5	150.71	4.380		
10,200.0	6,735.8	10,702.2	6,749.7	78.6	82.7	-91.21	3,882.3	-1,552.2	660.2	505.7	154.47	4.274		
10,300.0	6,745.8	10,802.2	6,759.6	80.4	84.4	-91.21	3,981.8	-1,552.2	660.2	501.9	158.23	4.172		
10,400.0	6,755.7	10,902.2	6,769.6	82.3	86.2	-91.21	4,081.3	-1,552.2	660.1	498.2	161.99	4.075		
10,500.0	6,765.6	11,002.2	6,779.5	84.1	88.0	-91.21	4,180.8	-1,552.2	660.1	494.4	165.76	3.982		
10,600.0	6,775.6	11,102.2	6,789.4	86.0	89.7	-91.21	4,280.3	-1,552.1	660.1	490.6	169.54	3.894		
10,700.0	6,785.5	11,202.2	6,799.4	87.9	91.5	-91.21	4,379.8	-1,552.1	660.1	486.8	173.31	3.809		
10,800.0	6,795.4	11,302.2	6,809.3	89.7	93.3	-91.21	4,479.3	-1,552.1	660.1	483.0	177.09	3.728		
10,900.0	6,805.4	11,402.2	6,819.2	91.6	95.1	-91.21	4,578.9	-1,552.1	660.1	479.2	180.87	3.650		
11,000.0	6,815.3	11,502.2	6,829.2	93.5	96.9	-91.21	4,678.4	-1,552.1	660.1	475.4	184.65	3.575		
11,100.0	6,825.2	11,602.2	6,839.1	95.3	98.7	-91.21	4,777.9	-1,552.1	660.1	471.7	188.44	3.503		
11,200.0	6,835.2	11,702.2	6,849.0	97.2	100.5	-91.21	4,877.4	-1,552.1	660.1	467.9	192.23	3.434		
11,300.0	6,845.1	11,802.2	6,859.0	99.1	102.3	-91.21	4,976.9	-1,552.1	660.1	464.1	196.02	3.367		
11,400.0	6,855.0	11,902.2	6,868.9	101.0	104.1	-91.21	5,076.4	-1,552.1	660.1	460.3	199.81	3.303		
11,500.0	6,865.0	12,002.2	6,878.8	102.8	105.9	-91.21	5,175.9	-1,552.1	660.1	456.5	203.60	3.242		
11,600.0	6,874.9	12,102.2	6,888.8	104.7	107.7	-91.21	5,275.4	-1,552.1	660.1	452.7	207.40	3.183		
11,700.0	6,884.8	12,202.2	6,898.7	106.6	109.6	-91.21	5,374.9	-1,552.1	660.0	448.8	211.20	3.125		
11,800.0	6,894.8	12,302.2	6,908.6	108.5	111.4	-91.21	5,474.4	-1,552.1	660.0	445.0	215.00	3.070		
11,900.0	6,904.7	12,402.2	6,918.5	110.4	113.2	-91.21	5,573.9	-1,552.1	660.0	441.2	218.80	3.017		
12,000.0	6,914.6	12,502.2	6,928.5	112.3	115.1	-91.21	5,673.4	-1,552.0	660.0	437.4	222.60	2.965		
12,100.0	6,924.6	12,602.2	6,938.4	114.1	116.9	-91.21	5,772.9	-1,552.0	660.0	433.6	226.40	2.915		
12,200.0	6,934.5	12,702.2	6,948.3	116.0	118.7	-91.21	5,872.4	-1,552.0	660.0	429.8	230.21	2.867		
12,300.0	6,944.4	12,802.2	6,958.3	117.9	120.6	-91.21	5,971.9	-1,552.0	660.0	426.0	234.01	2.820		
12,336.4	6,948.0	12,838.6	6,961.9	118.5	121.3	-91.21	6,008.1	-1,552.0	660.0	424.7	235.26	2.805		
12,336.7	6,948.1	12,838.9	6,961.9	118.5	121.3	-91.21	6,008.5	-1,552.0	660.0	424.7	235.27	2.805		



# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 4-6H - 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	24.21	13.7	6.2	15.0					
100.0	100.0	100.0	100.0	0.1	0.1	24.21	13.7	6.2	15.0	14.8	0.19	79.560		
200.0	200.0	200.0	200.0	0.3	0.3	24.21	13.7	6.2	15.0	14.4	0.64	23.532		
300.0	300.0	300.0	300.0	0.5	0.5	24.21	13.7	6.2	15.0	13.9	1.09	13.808		
400.0	400.0	400.0	400.0	0.8	0.8	24.21	13.7	6.2	15.0	13.5	1.54	9.771		
500.0	500.0	500.0	500.0	1.0	1.0	24.21	13.7	6.2	15.0	13.0	1.99	7.560		
600.0	600.0	600.0	600.0	1.2	1.2	24.21	13.7	6.2	15.0	12.6	2.44	6.165		
700.0	700.0	700.0	700.0	1.4	1.4	24.21	13.7	6.2	15.0	12.1	2.89	5.205		
800.0	800.0	800.0	800.0	1.7	1.7	24.21	13.7	6.2	15.0	11.7	3.34	4.503		
900.0	900.0	900.0	900.0	1.9	1.9	24.21	13.7	6.2	15.0	11.2	3.79	3.969		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	24.21	13.7	6.2	15.0	10.8	4.23	3.547		
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	24.21	13.7	6.2	15.0	10.3	4.68	3.207		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	24.21	13.7	6.2	15.0	9.9	5.13	2.926		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	24.21	13.7	6.2	15.0	9.4	5.58	2.690		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	24.21	13.7	6.2	15.0	9.0	6.03	2.490		
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.2	24.21	13.7	6.2	15.0	8.5	6.48	2.317		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	24.21	13.7	6.2	15.0	8.1	6.93	2.167		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	24.21	13.7	6.2	15.0	7.6	7.38	2.035		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	24.21	13.7	6.2	15.0	7.2	7.83	1.918	Level 4	
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.1	24.21	13.7	6.2	15.0	6.7	8.28	1.814	Level 4	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	24.21	13.7	6.2	15.0	6.3	8.73	1.721	Level 4	
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	24.21	13.7	6.2	15.0	5.8	9.18	1.636	Level 4	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	24.21	13.7	6.2	15.0	5.4	9.63	1.560	Level 4	
2,300.0	2,300.0	2,300.0	2,300.0	5.0	5.0	24.21	13.7	6.2	15.0	4.9	10.08	1.490	Level 3	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	24.21	13.7	6.2	15.0	4.5	10.53	1.427	Level 3	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	24.21	13.7	6.2	15.0	4.0	10.98	1.368	Level 3	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	24.21	13.7	6.2	15.0	3.6	11.43	1.315	Level 3	
2,700.0	2,700.0	2,700.0	2,700.0	5.9	5.9	24.21	13.7	6.2	15.0	3.1	11.88	1.265	Level 3	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	24.21	13.7	6.2	15.0	2.7	12.33	1.219	Level 2	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	24.21	13.7	6.2	15.0	2.2	12.78	1.176	Level 2	
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	24.21	13.7	6.2	15.0	1.8	13.23	1.136	Level 2	
3,100.0	3,100.0	3,100.0	3,100.0	6.8	6.8	24.21	13.7	6.2	15.0	1.3	13.67	1.098	Level 2	
3,150.0	3,150.0	3,150.0	3,150.0	6.9	6.9	24.21	13.7	6.2	15.0	1.1	13.90	1.081	Level 2, CC, ES, SF	
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	125.03	13.7	6.2	15.3	1.2	14.12	1.082	Level 2	
3,300.0	3,299.9	3,299.9	3,299.9	7.2	7.3	134.39	13.7	6.2	17.5	3.0	14.53	1.205	Level 2	
3,400.0	3,399.7	3,399.7	3,399.7	7.4	7.5	146.87	13.7	6.2	22.9	8.0	14.93	1.536	Level 4	
3,500.0	3,499.1	3,500.2	3,500.2	7.7	7.7	157.41	12.6	4.8	30.5	15.2	15.29	1.993	Level 4	
3,600.0	3,598.2	3,600.9	3,600.8	7.9	7.9	166.18	9.4	0.6	38.6	23.0	15.62	2.471		
3,700.0	3,696.6	3,701.8	3,701.3	8.1	8.1	173.90	4.0	-6.4	47.4	31.5	15.93	2.979		
3,800.0	3,794.4	3,801.9	3,800.6	8.4	8.3	-179.46	-3.2	-15.8	57.7	41.4	16.24	3.552		
3,900.0	3,891.5	3,900.8	3,898.8	8.7	8.5	-174.94	-10.5	-25.3	71.5	55.0	16.55	4.322		
3,960.1	3,949.3	3,959.9	3,957.5	8.9	8.6	-173.12	-14.9	-31.1	81.6	64.9	16.74	4.877		
4,000.0	3,987.7	3,999.2	3,996.5	9.0	8.7	-172.18	-17.9	-34.9	88.8	71.9	16.91	5.254		
4,100.0	4,083.7	4,097.5	4,094.1	9.4	8.9	-170.40	-25.2	-44.4	106.9	89.5	17.33	6.166		
4,200.0	4,179.7	4,195.8	4,191.6	9.8	9.1	-169.13	-32.5	-53.9	125.0	107.2	17.77	7.033		
4,300.0	4,275.7	4,294.1	4,289.2	10.2	9.4	-168.18	-39.8	-63.4	143.1	124.9	18.22	7.857		
4,400.0	4,371.8	4,392.5	4,386.8	10.6	9.6	-167.44	-47.1	-72.9	161.3	142.6	18.68	8.638		
4,500.0	4,467.8	4,490.8	4,484.4	11.0	9.8	-166.86	-54.4	-82.4	179.5	160.4	19.14	9.377		
4,600.0	4,563.8	4,589.1	4,581.9	11.5	10.1	-166.38	-61.7	-91.9	197.7	178.1	19.62	10.078		
4,700.0	4,659.9	4,687.4	4,679.5	12.0	10.3	-165.98	-69.1	-101.4	216.0	195.9	20.11	10.742		
4,800.0	4,755.9	4,785.7	4,777.1	12.4	10.6	-165.65	-76.4	-110.9	234.2	213.6	20.60	11.370		
4,900.0	4,851.9	4,884.0	4,874.7	12.9	10.8	-165.36	-83.7	-120.4	252.5	231.4	21.10	11.965		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 4-6H - 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		
5,000.0	4,948.0	4,982.3	4,972.3	13.4	11.1	-165.11	-91.0	-129.9	270.7	249.1	21.61	12.529		
5,100.0	5,044.0	5,080.7	5,069.8	13.9	11.3	-164.89	-98.3	-139.4	289.0	266.8	22.12	13.063		
5,200.0	5,140.0	5,179.0	5,167.4	14.5	11.6	-164.70	-105.6	-149.0	307.2	284.6	22.64	13.570		
5,300.0	5,236.0	5,277.3	5,265.0	15.0	11.9	-164.53	-112.9	-158.5	325.5	302.3	23.16	14.051		
5,400.0	5,332.1	5,375.6	5,362.6	15.5	12.1	-164.38	-120.2	-168.0	343.7	320.0	23.69	14.507		
5,500.0	5,428.1	5,473.9	5,460.2	16.0	12.4	-164.24	-127.6	-177.5	362.0	337.8	24.23	14.941		
5,600.0	5,524.1	5,572.2	5,557.7	16.6	12.7	-164.12	-134.9	-187.0	380.3	355.5	24.77	15.353		
5,700.0	5,620.2	5,672.7	5,657.7	17.1	12.9	-164.68	-137.7	-196.5	398.3	373.1	25.25	15.774		
5,732.4	5,651.3	5,705.1	5,689.9	17.3	13.0	-165.27	-135.8	-199.4	404.1	378.7	25.37	15.925		
5,750.0	5,668.2	5,722.6	5,707.2	17.4	13.0	-170.72	-134.1	-200.9	407.2	381.8	25.40	16.033		
5,800.0	5,716.1	5,771.7	5,755.6	17.6	13.1	174.22	-127.1	-205.0	416.7	391.2	25.47	16.360		
5,850.0	5,763.8	5,820.3	5,803.0	17.9	13.2	160.78	-116.9	-208.9	426.9	401.4	25.54	16.713		
5,900.0	5,810.9	5,868.3	5,849.0	18.1	13.3	149.51	-103.7	-212.5	437.7	412.1	25.63	17.078		
5,950.0	5,857.3	5,915.9	5,893.6	18.4	13.4	140.30	-87.7	-215.8	449.1	423.4	25.75	17.444		
6,000.0	5,902.8	5,962.9	5,936.7	18.6	13.4	132.78	-68.9	-218.8	461.0	435.1	25.90	17.797		
6,050.0	5,947.0	6,009.6	5,978.0	18.9	13.5	126.57	-47.5	-221.5	473.3	447.2	26.11	18.126		
6,100.0	5,989.8	6,055.8	6,017.6	19.1	13.6	121.37	-23.7	-223.9	485.9	459.5	26.38	18.420		
6,150.0	6,031.0	6,101.7	6,055.3	19.4	13.6	116.94	2.4	-226.1	498.8	472.1	26.72	18.671		
6,200.0	6,070.4	6,147.3	6,091.0	19.6	13.7	113.13	30.6	-227.9	511.9	484.8	27.12	18.873		
6,250.0	6,107.8	6,192.6	6,124.7	19.9	13.7	109.80	60.9	-229.4	525.1	497.5	27.61	19.021		
6,300.0	6,143.0	6,237.8	6,156.3	20.2	13.8	106.86	93.1	-230.6	538.4	510.2	28.15	19.125		
6,350.0	6,175.8	6,282.7	6,185.6	20.5	13.9	104.27	127.1	-231.5	551.6	522.8	28.77	19.169		
6,400.0	6,206.1	6,327.5	6,212.8	20.8	14.1	101.96	162.7	-232.1	564.7	535.2	29.46	19.170		
6,450.0	6,233.8	6,372.2	6,237.6	21.1	14.3	99.90	199.9	-232.4	577.6	547.4	30.20	19.128		
6,472.1	6,245.1	6,391.9	6,247.8	21.3	14.4	99.06	216.7	-232.5	583.3	552.7	30.54	19.099		
6,500.0	6,259.0	6,418.5	6,261.1	21.5	14.5	99.01	239.8	-232.5	590.4	559.4	31.01	19.040		
6,600.0	6,309.0	6,515.1	6,309.4	22.3	15.2	98.81	323.5	-232.5	615.9	583.1	32.82	18.769		
6,622.1	6,320.1	6,536.5	6,320.1	22.5	15.4	98.77	342.0	-232.5	621.6	588.3	33.25	18.694		
6,650.0	6,333.6	6,563.5	6,333.4	22.7	15.6	97.22	365.5	-232.5	628.4	594.7	33.71	18.641		
6,700.0	6,355.3	6,612.4	6,354.7	23.2	16.1	94.84	409.4	-232.5	639.0	604.5	34.52	18.511		
6,750.0	6,373.7	6,661.5	6,372.3	23.6	16.6	92.91	455.4	-232.5	647.5	612.2	35.32	18.333		
6,800.0	6,388.7	6,710.9	6,385.9	24.0	17.1	91.39	502.8	-232.5	653.8	617.7	36.10	18.110		
6,850.0	6,400.1	6,760.4	6,395.4	24.5	17.7	90.25	551.3	-232.5	657.8	621.0	36.87	17.842		
6,900.0	6,407.9	6,810.0	6,401.1	24.9	18.3	89.49	600.6	-232.5	659.6	622.0	37.63	17.531		
6,913.9	6,409.5	6,823.9	6,402.5	25.1	18.5	89.39	614.5	-232.5	659.7	621.9	37.84	17.434		
7,000.0	6,418.0	6,910.0	6,411.0	25.9	19.6	89.39	700.2	-232.5	659.7	619.6	40.10	16.454		
7,100.0	6,428.0	7,010.0	6,421.0	26.9	21.0	89.39	799.7	-232.5	659.7	616.9	42.86	15.391		
7,200.0	6,437.9	7,110.0	6,430.9	28.1	22.5	89.39	899.2	-232.5	659.7	613.9	45.79	14.408		
7,300.0	6,447.8	7,210.0	6,440.8	29.3	24.1	89.39	998.7	-232.5	659.7	610.9	48.84	13.508		
7,400.0	6,457.7	7,310.0	6,450.8	30.6	25.6	89.39	1,098.2	-232.5	659.7	607.7	51.99	12.689		
7,500.0	6,467.7	7,410.0	6,460.7	32.0	27.3	89.39	1,197.7	-232.4	659.7	604.5	55.24	11.944		
7,600.0	6,477.6	7,510.0	6,470.6	33.5	28.9	89.39	1,297.2	-232.4	659.7	601.2	58.55	11.268		
7,700.0	6,487.5	7,610.0	6,480.6	35.0	30.6	89.39	1,396.7	-232.4	659.7	597.8	61.93	10.653		
7,800.0	6,497.5	7,710.0	6,490.5	36.5	32.4	89.39	1,496.2	-232.4	659.7	594.4	65.36	10.095		
7,900.0	6,507.4	7,810.0	6,500.4	38.0	34.1	89.39	1,595.7	-232.4	659.7	590.9	68.83	9.586		
8,000.0	6,517.3	7,910.0	6,510.4	39.6	35.9	89.39	1,695.2	-232.4	659.7	587.4	72.34	9.121		
8,100.0	6,527.3	8,010.0	6,520.3	41.3	37.7	89.39	1,794.7	-232.4	659.8	583.9	75.88	8.695		
8,200.0	6,537.2	8,110.0	6,530.2	42.9	39.4	89.39	1,894.2	-232.4	659.8	580.3	79.45	8.304		
8,300.0	6,547.1	8,210.0	6,540.2	44.6	41.2	89.39	1,993.7	-232.4	659.8	576.7	83.04	7.945		
8,400.0	6,557.1	8,310.0	6,550.1	46.3	43.1	89.39	2,093.2	-232.4	659.8	573.1	86.65	7.614		
8,500.0	6,567.0	8,410.0	6,560.0	48.0	44.9	89.39	2,192.7	-232.4	659.8	569.5	90.29	7.307		
8,600.0	6,576.9	8,510.0	6,570.0	49.7	46.7	89.39	2,292.2	-232.4	659.8	565.8	93.94	7.023		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 4-6H - 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		
8,700.0	6,586.9	8,610.0	6,579.9	51.5	48.6	89.39	2,391.7	-232.4	659.8	562.2	97.60	6.760		
8,800.0	6,596.8	8,710.0	6,589.8	53.2	50.4	89.39	2,491.3	-232.4	659.8	558.5	101.28	6.514		
8,900.0	6,606.7	8,810.0	6,599.7	55.0	52.2	89.39	2,590.8	-232.4	659.8	554.8	104.97	6.285		
9,000.0	6,616.7	8,910.0	6,609.7	56.8	54.1	89.39	2,690.3	-232.4	659.8	551.1	108.67	6.071		
9,100.0	6,626.6	9,010.0	6,619.6	58.5	56.0	89.39	2,789.8	-232.4	659.8	547.4	112.38	5.871		
9,200.0	6,636.5	9,110.0	6,629.5	60.3	57.8	89.39	2,889.3	-232.4	659.8	543.7	116.10	5.683		
9,300.0	6,646.5	9,210.0	6,639.5	62.1	59.7	89.39	2,988.8	-232.4	659.8	540.0	119.83	5.506		
9,400.0	6,656.4	9,310.0	6,649.4	63.9	61.6	89.39	3,088.3	-232.4	659.8	536.2	123.56	5.340		
9,500.0	6,666.3	9,410.0	6,659.3	65.7	63.4	89.39	3,187.8	-232.4	659.8	532.5	127.30	5.183		
9,600.0	6,676.3	9,510.0	6,669.3	67.6	65.3	89.39	3,287.3	-232.4	659.8	528.8	131.05	5.035		
9,700.0	6,686.2	9,610.0	6,679.2	69.4	67.2	89.39	3,386.8	-232.4	659.8	525.0	134.80	4.895		
9,800.0	6,696.1	9,710.0	6,689.1	71.2	69.1	89.39	3,486.3	-232.4	659.8	521.2	138.56	4.762		
9,900.0	6,706.0	9,810.0	6,699.1	73.1	70.9	89.39	3,585.8	-232.4	659.8	517.5	142.32	4.636		
10,000.0	6,716.0	9,910.0	6,709.0	74.9	72.8	89.39	3,685.3	-232.4	659.8	513.7	146.08	4.517		
10,100.0	6,725.9	10,010.0	6,718.9	76.7	74.7	89.39	3,784.8	-232.4	659.8	510.0	149.85	4.403		
10,200.0	6,735.8	10,110.0	6,728.9	78.6	76.6	89.39	3,884.3	-232.4	659.8	506.2	153.62	4.295		
10,300.0	6,745.8	10,210.0	6,738.8	80.4	78.5	89.39	3,983.8	-232.4	659.8	502.4	157.40	4.192		
10,400.0	6,755.7	10,310.0	6,748.7	82.3	80.4	89.39	4,083.3	-232.4	659.8	498.6	161.18	4.094		
10,500.0	6,765.6	10,410.0	6,758.7	84.1	82.3	89.39	4,182.8	-232.4	659.8	494.9	164.96	4.000		
10,600.0	6,775.6	10,510.0	6,768.6	86.0	84.2	89.39	4,282.4	-232.4	659.8	491.1	168.75	3.910		
10,700.0	6,785.5	10,610.0	6,778.5	87.9	86.1	89.39	4,381.9	-232.4	659.8	487.3	172.53	3.824		
10,800.0	6,795.4	10,710.0	6,788.5	89.7	88.0	89.39	4,481.4	-232.4	659.8	483.5	176.32	3.742		
10,900.0	6,805.4	10,810.0	6,798.4	91.6	89.9	89.39	4,580.9	-232.4	659.8	479.7	180.12	3.663		
11,000.0	6,815.3	10,910.0	6,808.3	93.5	91.8	89.39	4,680.4	-232.4	659.8	475.9	183.91	3.588		
11,100.0	6,825.2	11,010.0	6,818.3	95.3	93.7	89.39	4,779.9	-232.4	659.8	472.1	187.71	3.515		
11,200.0	6,835.2	11,110.0	6,828.2	97.2	95.6	89.39	4,879.4	-232.4	659.9	468.3	191.51	3.446		
11,300.0	6,845.1	11,210.0	6,838.1	99.1	97.5	89.39	4,978.9	-232.3	659.9	464.5	195.30	3.379		
11,400.0	6,855.0	11,310.0	6,848.0	101.0	99.4	89.39	5,078.4	-232.3	659.9	460.8	199.11	3.314		
11,500.0	6,865.0	11,410.0	6,858.0	102.8	101.3	89.39	5,177.9	-232.3	659.9	457.0	202.91	3.252		
11,600.0	6,874.9	11,510.0	6,867.9	104.7	103.2	89.39	5,277.4	-232.3	659.9	453.1	206.71	3.192		
11,700.0	6,884.8	11,610.0	6,877.8	106.6	105.1	89.39	5,376.9	-232.3	659.9	449.3	210.52	3.134		
11,800.0	6,894.8	11,710.0	6,887.8	108.5	107.0	89.39	5,476.4	-232.3	659.9	445.5	214.33	3.079		
11,900.0	6,904.7	11,810.0	6,897.7	110.4	108.9	89.39	5,575.9	-232.3	659.9	441.7	218.13	3.025		
12,000.0	6,914.6	11,910.0	6,907.6	112.3	110.8	89.39	5,675.4	-232.3	659.9	437.9	221.94	2.973		
12,100.0	6,924.6	12,010.0	6,917.6	114.1	112.7	89.39	5,774.9	-232.3	659.9	434.1	225.76	2.923		
12,200.0	6,934.5	12,110.0	6,927.5	116.0	114.6	89.39	5,874.4	-232.3	659.9	430.3	229.57	2.874		
12,300.0	6,944.4	12,210.0	6,937.4	117.9	116.5	89.39	5,973.9	-232.3	659.9	426.5	233.34	2.828		
12,317.3	6,946.1	12,227.4	6,939.2	118.2	116.7	89.39	5,991.2	-232.3	659.9	426.0	233.87	2.822		
12,336.4	6,948.0	12,246.1	6,941.0	118.5	117.0	89.39	6,009.8	-232.3	659.9	425.4	234.45	2.815		
12,336.7	6,948.1	12,246.1	6,941.0	118.5	117.0	89.39	6,009.8	-232.3	659.9	425.4	234.46	2.815		

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 5-6H - 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													
100.0	100.0	101.2	101.2	0.1	0.1	24.59	68.2	31.2	75.0	74.8	0.19	391.818		
200.0	200.0	201.2	201.2	0.3	0.3	24.59	68.2	31.2	75.0	74.4	0.64	117.051		
300.0	300.0	301.2	301.2	0.5	0.5	24.59	68.2	31.2	75.0	73.9	1.09	68.802		
400.0	400.0	401.2	401.2	0.8	0.8	24.59	68.2	31.2	75.0	73.5	1.54	48.720		
500.0	500.0	501.2	501.2	1.0	1.0	24.59	68.2	31.2	75.0	73.0	1.99	37.712		
600.0	600.0	601.2	601.2	1.2	1.2	24.59	68.2	31.2	75.0	72.6	2.44	30.762		
700.0	700.0	701.2	701.2	1.4	1.4	24.59	68.2	31.2	75.0	72.1	2.89	25.975		
800.0	800.0	801.2	801.2	1.7	1.7	24.59	68.2	31.2	75.0	71.7	3.34	22.477		
900.0	900.0	901.2	901.2	1.9	1.9	24.59	68.2	31.2	75.0	71.2	3.79	19.809		
1,000.0	1,000.0	1,001.2	1,001.2	2.1	2.1	24.59	68.2	31.2	75.0	70.8	4.24	17.708		
1,100.0	1,100.0	1,101.2	1,101.2	2.3	2.3	24.59	68.2	31.2	75.0	70.3	4.69	16.009		
1,200.0	1,200.0	1,201.2	1,201.2	2.6	2.6	24.59	68.2	31.2	75.0	69.9	5.14	14.608		
1,300.0	1,300.0	1,301.2	1,301.2	2.8	2.8	24.59	68.2	31.2	75.0	69.4	5.59	13.433		
1,400.0	1,400.0	1,401.2	1,401.2	3.0	3.0	24.59	68.2	31.2	75.0	69.0	6.04	12.432		
1,500.0	1,500.0	1,501.2	1,501.2	3.2	3.2	24.59	68.2	31.2	75.0	68.5	6.48	11.570		
1,600.0	1,600.0	1,601.2	1,601.2	3.5	3.5	24.59	68.2	31.2	75.0	68.1	6.93	10.820		
1,700.0	1,700.0	1,701.2	1,701.2	3.7	3.7	24.59	68.2	31.2	75.0	67.6	7.38	10.162		
1,800.0	1,800.0	1,801.2	1,801.2	3.9	3.9	24.59	68.2	31.2	75.0	67.2	7.83	9.578		
1,900.0	1,900.0	1,901.2	1,901.2	4.1	4.1	24.59	68.2	31.2	75.0	66.8	8.28	9.059		
2,000.0	2,000.0	2,001.2	2,001.2	4.4	4.4	24.59	68.2	31.2	75.0	66.3	8.73	8.592		
2,100.0	2,100.0	2,101.2	2,101.2	4.6	4.6	24.59	68.2	31.2	75.0	65.9	9.18	8.172		
2,200.0	2,200.0	2,201.2	2,201.2	4.8	4.8	24.59	68.2	31.2	75.0	65.4	9.63	7.790		
2,300.0	2,300.0	2,301.2	2,301.2	5.0	5.0	24.59	68.2	31.2	75.0	65.0	10.08	7.443		
2,400.0	2,400.0	2,401.2	2,401.2	5.3	5.3	24.59	68.2	31.2	75.0	64.5	10.53	7.125		
2,500.0	2,500.0	2,501.2	2,501.2	5.5	5.5	24.59	68.2	31.2	75.0	64.1	10.98	6.833		
2,600.0	2,600.0	2,601.2	2,601.2	5.7	5.7	24.59	68.2	31.2	75.0	63.6	11.43	6.565		
2,700.0	2,700.0	2,701.2	2,701.2	5.9	5.9	24.59	68.2	31.2	75.0	63.2	11.88	6.316		
2,800.0	2,800.0	2,801.2	2,801.2	6.2	6.2	24.59	68.2	31.2	75.0	62.7	12.33	6.086		
2,900.0	2,900.0	2,901.2	2,901.2	6.4	6.4	24.59	68.2	31.2	75.0	62.3	12.78	5.872		
3,000.0	3,000.0	3,001.2	3,001.2	6.6	6.6	24.59	68.2	31.2	75.0	61.8	13.23	5.672		
3,100.0	3,100.0	3,101.2	3,101.2	6.8	6.8	24.59	68.2	31.2	75.0	61.4	13.68	5.486		
3,150.0	3,150.0	3,151.2	3,151.2	6.9	7.0	24.59	68.2	31.2	75.0	61.1	13.90	5.397 CC, ES		
3,200.0	3,200.0	3,201.2	3,201.2	7.1	7.1	124.32	68.2	31.2	75.3	61.2	14.12	5.332		
3,300.0	3,299.9	3,301.1	3,301.1	7.2	7.3	126.42	68.2	31.2	77.3	62.8	14.53	5.319 SF		
3,400.0	3,399.7	3,400.9	3,400.9	7.4	7.5	130.29	68.2	31.2	81.6	66.7	14.94	5.463		
3,500.0	3,499.1	3,500.3	3,500.3	7.7	7.7	136.47	67.2	32.6	88.8	73.4	15.32	5.792		
3,600.0	3,598.2	3,598.5	3,598.3	7.9	7.9	144.73	64.1	36.7	100.0	84.3	15.66	6.383		
3,700.0	3,696.6	3,694.7	3,694.2	8.1	8.1	153.45	59.1	43.3	116.9	100.9	15.98	7.316		
3,800.0	3,794.4	3,788.5	3,787.4	8.4	8.3	161.43	52.4	52.2	140.6	124.3	16.28	8.633		
3,900.0	3,891.5	3,879.5	3,877.3	8.7	8.5	168.12	44.1	63.2	171.1	154.6	16.57	10.329		
3,960.1	3,949.3	3,934.1	3,931.0	8.9	8.6	171.52	38.5	70.6	192.6	175.8	16.74	11.504		
4,000.0	3,987.7	3,970.5	3,967.0	9.0	8.7	173.49	34.7	75.6	207.5	190.6	16.89	12.287		
4,100.0	4,083.7	4,061.8	4,056.9	9.4	8.9	177.37	25.2	88.2	245.8	228.5	17.28	14.221		
4,200.0	4,179.7	4,153.1	4,146.8	9.8	9.1	-179.79	15.8	100.7	284.7	267.0	17.69	16.096		
4,300.0	4,275.7	4,244.4	4,236.8	10.2	9.3	-177.62	6.3	113.2	324.1	306.0	18.10	17.901		
4,400.0	4,371.8	4,335.7	4,326.7	10.6	9.6	-175.92	-3.1	125.8	363.8	345.3	18.53	19.630		
4,500.0	4,467.8	4,427.0	4,416.6	11.0	9.8	-174.55	-12.6	138.3	403.7	384.7	18.97	21.282		
4,600.0	4,563.8	4,518.3	4,506.6	11.5	10.1	-173.43	-22.0	150.8	443.8	424.4	19.42	22.856		
4,700.0	4,659.9	4,609.6	4,596.5	12.0	10.3	-172.49	-31.5	163.4	484.0	464.1	19.87	24.354		
4,800.0	4,755.9	4,700.9	4,686.4	12.4	10.6	-171.69	-41.0	175.9	524.3	504.0	20.34	25.780		
4,900.0	4,851.9	4,792.2	4,776.4	12.9	10.9	-171.01	-50.4	188.4	564.7	543.9	20.81	27.136		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 5-6H - 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		
5,000.0	4,948.0	4,883.5	4,866.3	13.4	11.2	-170.42	-59.9	201.0	605.1	583.8	21.29	28.425		
5,100.0	5,044.0	4,974.8	4,956.3	13.9	11.5	-169.90	-69.3	213.5	645.6	623.8	21.77	29.650		
5,200.0	5,140.0	5,066.1	5,046.2	14.5	11.8	-169.45	-78.8	226.0	686.1	663.8	22.26	30.816		
5,300.0	5,236.0	5,157.4	5,136.1	15.0	12.1	-169.04	-88.2	238.6	726.7	703.9	22.76	31.925		
5,400.0	5,332.1	5,248.7	5,226.1	15.5	12.4	-168.68	-97.7	251.1	767.2	744.0	23.26	32.980		
5,500.0	5,428.1	5,340.0	5,316.0	16.0	12.7	-168.35	-107.2	263.6	807.8	784.1	23.77	33.984		
5,600.0	5,524.1	5,431.3	5,405.9	16.6	13.0	-168.06	-116.6	276.1	848.4	824.2	24.28	34.941		
5,700.0	5,620.2	5,522.6	5,495.9	17.1	13.3	-167.79	-126.1	288.7	889.1	864.3	24.80	35.852		
5,732.4	5,651.3	5,552.2	5,525.0	17.3	13.4	-167.71	-129.1	292.7	902.3	877.3	24.97	36.138		
5,750.0	5,668.2	5,568.2	5,540.8	17.4	13.4	-173.10	-130.8	294.9	909.4	884.4	25.03	36.330		
5,800.0	5,716.1	5,619.7	5,591.6	17.6	13.6	172.07	-134.9	301.9	930.1	904.9	25.23	36.861		
5,850.0	5,763.8	5,673.1	5,644.6	17.9	13.7	158.87	-135.3	308.9	950.9	925.4	25.43	37.385		
5,900.0	5,810.9	5,727.1	5,698.1	18.1	13.9	147.81	-131.7	315.6	971.6	946.0	25.64	37.897		
5,950.0	5,857.3	5,781.8	5,751.7	18.4	14.0	138.78	-124.0	322.1	992.3	966.4	25.85	38.382		
6,000.0	5,902.8	5,837.1	5,805.4	18.6	14.1	131.42	-111.9	328.2	1,012.7	986.6	26.08	38.828		
6,050.0	5,947.0	5,893.2	5,858.7	18.9	14.1	125.36	-95.6	333.9	1,032.8	1,006.5	26.33	39.222		
6,100.0	5,989.8	5,950.1	5,911.4	19.1	14.2	120.28	-74.7	339.2	1,052.5	1,025.9	26.61	39.550		
6,150.0	6,031.0	6,007.8	5,963.0	19.4	14.3	115.97	-49.3	344.1	1,071.7	1,044.7	26.93	39.801		
6,200.0	6,070.4	6,066.5	6,013.3	19.6	14.3	112.25	-19.4	348.3	1,090.2	1,062.9	27.28	39.963		
6,250.0	6,107.8	6,126.1	6,061.7	19.9	14.4	109.01	15.2	352.0	1,108.0	1,080.3	27.68	40.025		
6,300.0	6,143.0	6,186.6	6,107.8	20.2	14.4	106.15	54.2	355.1	1,124.9	1,096.8	28.14	39.978		
6,350.0	6,175.8	6,248.0	6,151.1	20.5	14.4	103.61	97.7	357.4	1,141.0	1,112.3	28.66	39.812		
6,400.0	6,206.1	6,310.3	6,191.1	20.8	14.5	101.35	145.3	359.0	1,156.0	1,126.7	29.25	39.514		
6,450.0	6,233.8	6,373.3	6,227.3	21.1	14.6	99.33	196.9	359.8	1,169.8	1,139.9	29.94	39.071		
6,472.1	6,245.1	6,401.3	6,241.9	21.3	14.7	98.51	220.8	359.8	1,175.6	1,145.3	30.26	38.847		
6,500.0	6,259.0	6,429.4	6,255.9	21.5	14.8	98.48	245.0	359.8	1,182.7	1,152.0	30.67	38.558		
6,600.0	6,309.0	6,526.0	6,304.3	22.3	15.3	98.39	328.8	359.7	1,208.1	1,175.9	32.24	37.478		
6,622.1	6,320.1	6,547.4	6,314.9	22.5	15.4	98.37	347.3	359.7	1,213.7	1,181.1	32.61	37.215		
6,650.0	6,333.6	6,574.2	6,328.1	22.7	15.6	96.83	370.7	359.6	1,220.5	1,187.5	33.06	36.923		
6,700.0	6,355.3	6,622.4	6,349.0	23.2	16.1	94.48	414.1	359.6	1,231.1	1,197.2	33.86	36.362		
6,750.0	6,373.7	6,671.0	6,366.3	23.6	16.5	92.59	459.4	359.5	1,239.5	1,204.8	34.67	35.746		
6,800.0	6,388.7	6,719.8	6,379.8	24.0	17.0	91.14	506.3	359.4	1,245.7	1,210.2	35.52	35.074		
6,850.0	6,400.1	6,768.6	6,389.2	24.5	17.5	90.08	554.2	359.4	1,249.7	1,213.3	36.38	34.350		
6,900.0	6,407.9	6,817.9	6,394.9	24.9	18.1	89.42	603.1	359.3	1,251.4	1,214.2	37.28	33.572		
6,913.9	6,409.5	6,831.7	6,396.3	25.1	18.3	89.33	616.9	359.3	1,251.5	1,214.0	37.53	33.344		
7,000.0	6,418.0	6,917.9	6,404.9	25.9	19.4	89.33	702.6	359.2	1,251.4	1,211.7	39.73	31.495		
7,100.0	6,428.0	7,017.9	6,414.8	26.9	20.7	89.33	802.1	359.0	1,251.3	1,208.8	42.45	29.478		
7,200.0	6,437.9	7,117.9	6,424.7	28.1	22.2	89.33	901.6	358.9	1,251.1	1,205.8	45.32	27.604		
7,300.0	6,447.8	7,217.9	6,434.6	29.3	23.7	89.33	1,001.1	358.8	1,251.0	1,202.7	48.34	25.881		
7,400.0	6,457.7	7,317.9	6,444.6	30.6	25.2	89.33	1,100.6	358.6	1,250.9	1,199.4	51.46	24.308		
7,500.0	6,467.7	7,417.9	6,454.5	32.0	26.8	89.33	1,200.1	358.5	1,250.7	1,196.1	54.67	22.876		
7,600.0	6,477.6	7,517.9	6,464.4	33.5	28.5	89.33	1,299.6	358.4	1,250.6	1,192.6	57.97	21.575		
7,700.0	6,487.5	7,617.9	6,474.4	35.0	30.1	89.33	1,399.1	358.2	1,250.5	1,189.1	61.32	20.392		
7,800.0	6,497.5	7,717.9	6,484.3	36.5	31.8	89.33	1,498.6	358.1	1,250.3	1,185.6	64.73	19.316		
7,900.0	6,507.4	7,817.9	6,494.2	38.0	33.6	89.33	1,598.1	358.0	1,250.2	1,182.0	68.19	18.335		
8,000.0	6,517.3	7,917.9	6,504.2	39.6	35.3	89.33	1,697.7	357.8	1,250.1	1,178.4	71.68	17.439		
8,100.0	6,527.3	8,017.9	6,514.1	41.3	37.1	89.33	1,797.2	357.7	1,249.9	1,174.7	75.21	16.619		
8,200.0	6,537.2	8,117.9	6,524.0	42.9	38.9	89.33	1,896.7	357.6	1,249.8	1,171.0	78.77	15.866		
8,300.0	6,547.1	8,217.9	6,534.0	44.6	40.6	89.33	1,996.2	357.4	1,249.7	1,167.3	82.36	15.174		
8,400.0	6,557.1	8,317.9	6,543.9	46.3	42.4	89.33	2,095.7	357.3	1,249.5	1,163.6	85.96	14.536		
8,500.0	6,567.0	8,417.9	6,553.8	48.0	44.3	89.33	2,195.2	357.2	1,249.4	1,159.8	89.59	13.946		
8,600.0	6,576.9	8,517.9	6,563.8	49.7	46.1	89.33	2,294.7	357.0	1,249.3	1,156.0	93.23	13.399		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 5-6H - 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		
8,700.0	6,586.9	8,617.9	6,573.7	51.5	47.9	89.33	2,394.2	356.9	1,249.1	1,152.2	96.89	12.892		
8,800.0	6,596.8	8,717.9	6,583.6	53.2	49.7	89.33	2,493.7	356.8	1,249.0	1,148.4	100.56	12.420		
8,900.0	6,606.7	8,817.9	6,593.6	55.0	51.6	89.33	2,593.2	356.6	1,248.9	1,144.6	104.25	11.980		
9,000.0	6,616.7	8,917.9	6,603.5	56.8	53.4	89.33	2,692.7	356.5	1,248.7	1,140.8	107.95	11.568		
9,100.0	6,626.6	9,017.9	6,613.4	58.5	55.3	89.33	2,792.2	356.3	1,248.6	1,136.9	111.65	11.183		
9,200.0	6,636.5	9,117.9	6,623.4	60.3	57.1	89.33	2,891.7	356.2	1,248.5	1,133.1	115.37	10.822		
9,300.0	6,646.5	9,217.9	6,633.3	62.1	59.0	89.33	2,991.2	356.1	1,248.3	1,129.2	119.09	10.482		
9,400.0	6,656.4	9,317.9	6,643.2	63.9	60.9	89.33	3,090.7	355.9	1,248.2	1,125.4	122.82	10.163		
9,500.0	6,666.3	9,417.9	6,653.2	65.7	62.7	89.33	3,190.2	355.8	1,248.0	1,121.5	126.56	9.862		
9,600.0	6,676.3	9,517.9	6,663.1	67.6	64.6	89.33	3,289.7	355.7	1,247.9	1,117.6	130.30	9.577		
9,700.0	6,686.2	9,617.9	6,673.0	69.4	66.5	89.33	3,389.2	355.5	1,247.8	1,113.7	134.05	9.308		
9,800.0	6,696.1	9,717.9	6,682.9	71.2	68.4	89.33	3,488.8	355.4	1,247.6	1,109.8	137.80	9.054		
9,900.0	6,706.0	9,817.9	6,692.9	73.1	70.2	89.33	3,588.3	355.3	1,247.5	1,105.9	141.56	8.812		
10,000.0	6,716.0	9,917.9	6,702.8	74.9	72.1	89.33	3,687.8	355.1	1,247.4	1,102.1	145.33	8.583		
10,100.0	6,725.9	10,017.9	6,712.7	76.7	74.0	89.33	3,787.3	355.0	1,247.2	1,098.2	149.09	8.366		
10,200.0	6,735.8	10,117.9	6,722.7	78.6	75.9	89.33	3,886.8	354.9	1,247.1	1,094.2	152.86	8.158		
10,300.0	6,745.8	10,217.9	6,732.6	80.4	77.8	89.33	3,986.3	354.7	1,247.0	1,090.3	156.64	7.961		
10,400.0	6,755.7	10,317.9	6,742.5	82.3	79.7	89.33	4,085.8	354.6	1,246.8	1,086.4	160.42	7.772		
10,500.0	6,765.6	10,417.9	6,752.5	84.1	81.6	89.33	4,185.3	354.5	1,246.7	1,082.5	164.20	7.593		
10,600.0	6,775.6	10,517.9	6,762.4	86.0	83.4	89.33	4,284.8	354.3	1,246.6	1,078.6	167.98	7.421		
10,700.0	6,785.5	10,617.9	6,772.3	87.9	85.3	89.33	4,384.3	354.2	1,246.4	1,074.7	171.77	7.257		
10,800.0	6,795.4	10,717.9	6,782.3	89.7	87.2	89.33	4,483.8	354.1	1,246.3	1,070.7	175.56	7.099		
10,900.0	6,805.4	10,817.9	6,792.2	91.6	89.1	89.33	4,583.3	353.9	1,246.2	1,066.8	179.35	6.948		
11,000.0	6,815.3	10,917.9	6,802.1	93.5	91.0	89.33	4,682.8	353.8	1,246.0	1,062.9	183.14	6.804		
11,100.0	6,825.2	11,017.9	6,812.1	95.3	92.9	89.33	4,782.3	353.7	1,245.9	1,059.0	186.94	6.665		
11,200.0	6,835.2	11,117.8	6,822.0	97.2	94.8	89.33	4,881.8	353.5	1,245.8	1,055.0	190.73	6.531		
11,300.0	6,845.1	11,217.8	6,831.9	99.1	96.7	89.33	4,981.3	353.4	1,245.6	1,051.1	194.53	6.403		
11,400.0	6,855.0	11,317.8	6,841.9	101.0	98.6	89.33	5,080.8	353.2	1,245.5	1,047.2	198.33	6.280		
11,500.0	6,865.0	11,417.8	6,851.8	102.8	100.5	89.33	5,180.3	353.1	1,245.4	1,043.2	202.14	6.161		
11,600.0	6,874.9	11,517.8	6,861.7	104.7	102.4	89.33	5,279.8	353.0	1,245.2	1,039.3	205.94	6.047		
11,700.0	6,884.8	11,617.8	6,871.7	106.6	104.3	89.33	5,379.4	352.8	1,245.1	1,035.4	209.75	5.936		
11,800.0	6,894.8	11,717.8	6,881.6	108.5	106.2	89.33	5,478.9	352.7	1,245.0	1,031.4	213.55	5.830		
11,900.0	6,904.7	11,817.8	6,891.5	110.4	108.1	89.33	5,578.4	352.6	1,244.8	1,027.5	217.36	5.727		
12,000.0	6,914.6	11,917.8	6,901.5	112.3	110.0	89.33	5,677.9	352.4	1,244.7	1,023.5	221.17	5.628		
12,100.0	6,924.6	12,017.8	6,911.4	114.1	111.9	89.33	5,777.4	352.3	1,244.6	1,019.6	224.98	5.532		
12,200.0	6,934.5	12,117.8	6,921.3	116.0	113.8	89.33	5,876.9	352.2	1,244.4	1,015.6	228.79	5.439		
12,300.0	6,944.4	12,217.8	6,931.2	117.9	115.8	89.33	5,976.4	352.0	1,244.3	1,011.7	232.60	5.349		
12,335.8	6,948.0	12,251.7	6,934.6	118.5	116.4	89.33	6,010.1	352.0	1,244.2	1,010.4	233.80	5.322		
12,336.4	6,948.0	12,251.7	6,934.6	118.5	116.4	89.33	6,010.1	352.0	1,244.2	1,010.4	233.81	5.322		
12,336.7	6,948.1	12,251.7	6,934.6	118.5	116.4	89.33	6,010.1	352.0	1,244.2	1,010.4	233.81	5.322		

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 6-6H - 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	1.1	1.1	0.0	0.0	24.61	54.6	25.0	60.0					
100.0	100.0	101.1	101.1	0.1	0.1	24.61	54.6	25.0	60.0	59.8	0.19	313.808		
200.0	200.0	201.1	201.1	0.3	0.3	24.61	54.6	25.0	60.0	59.4	0.64	93.669		
300.0	300.0	301.1	301.1	0.5	0.5	24.61	54.6	25.0	60.0	58.9	1.09	55.051		
400.0	400.0	401.1	401.1	0.8	0.8	24.61	54.6	25.0	60.0	58.5	1.54	38.980		
500.0	500.0	501.1	501.1	1.0	1.0	24.61	54.6	25.0	60.0	58.0	1.99	30.172		
600.0	600.0	601.1	601.1	1.2	1.2	24.61	54.6	25.0	60.0	57.6	2.44	24.611		
700.0	700.0	701.1	701.1	1.4	1.4	24.61	54.6	25.0	60.0	57.1	2.89	20.781		
800.0	800.0	801.1	801.1	1.7	1.7	24.61	54.6	25.0	60.0	56.7	3.34	17.982		
900.0	900.0	901.1	901.1	1.9	1.9	24.61	54.6	25.0	60.0	56.2	3.79	15.848		
1,000.0	1,000.0	1,001.1	1,001.1	2.1	2.1	24.61	54.6	25.0	60.0	55.8	4.24	14.166		
1,100.0	1,100.0	1,101.1	1,101.1	2.3	2.3	24.61	54.6	25.0	60.0	55.3	4.69	12.808		
1,200.0	1,200.0	1,201.1	1,201.1	2.6	2.6	24.61	54.6	25.0	60.0	54.9	5.14	11.687		
1,300.0	1,300.0	1,301.1	1,301.1	2.8	2.8	24.61	54.6	25.0	60.0	54.4	5.59	10.746		
1,400.0	1,400.0	1,401.1	1,401.1	3.0	3.0	24.61	54.6	25.0	60.0	54.0	6.04	9.946		
1,500.0	1,500.0	1,501.1	1,501.1	3.2	3.2	24.61	54.6	25.0	60.0	53.5	6.48	9.256		
1,600.0	1,600.0	1,601.1	1,601.1	3.5	3.5	24.61	54.6	25.0	60.0	53.1	6.93	8.656		
1,700.0	1,700.0	1,701.1	1,701.1	3.7	3.7	24.61	54.6	25.0	60.0	52.6	7.38	8.129		
1,800.0	1,800.0	1,801.1	1,801.1	3.9	3.9	24.61	54.6	25.0	60.0	52.2	7.83	7.663		
1,900.0	1,900.0	1,901.1	1,901.1	4.1	4.1	24.61	54.6	25.0	60.0	51.7	8.28	7.247		
2,000.0	2,000.0	2,001.1	2,001.1	4.4	4.4	24.61	54.6	25.0	60.0	51.3	8.73	6.874		
2,100.0	2,100.0	2,101.1	2,101.1	4.6	4.6	24.61	54.6	25.0	60.0	50.8	9.18	6.537		
2,200.0	2,200.0	2,201.1	2,201.1	4.8	4.8	24.61	54.6	25.0	60.0	50.4	9.63	6.232		
2,300.0	2,300.0	2,301.1	2,301.1	5.0	5.0	24.61	54.6	25.0	60.0	49.9	10.08	5.954		
2,400.0	2,400.0	2,401.1	2,401.1	5.3	5.3	24.61	54.6	25.0	60.0	49.5	10.53	5.700		
2,500.0	2,500.0	2,501.1	2,501.1	5.5	5.5	24.61	54.6	25.0	60.0	49.0	10.98	5.467		
2,600.0	2,600.0	2,601.1	2,601.1	5.7	5.7	24.61	54.6	25.0	60.0	48.6	11.43	5.252		
2,700.0	2,700.0	2,701.1	2,701.1	5.9	5.9	24.61	54.6	25.0	60.0	48.1	11.88	5.053		
2,800.0	2,800.0	2,801.1	2,801.1	6.2	6.2	24.61	54.6	25.0	60.0	47.7	12.33	4.869		
2,900.0	2,900.0	2,901.1	2,901.1	6.4	6.4	24.61	54.6	25.0	60.0	47.2	12.78	4.697		
3,000.0	3,000.0	3,001.1	3,001.1	6.6	6.6	24.61	54.6	25.0	60.0	46.8	13.23	4.538		
3,100.0	3,100.0	3,101.1	3,101.1	6.8	6.8	24.61	54.6	25.0	60.0	46.3	13.68	4.389		
3,133.0	3,133.0	3,134.1	3,134.1	6.9	6.9	24.61	54.6	25.0	60.0	46.2	13.83	4.342 CC		
3,150.0	3,150.0	3,151.1	3,151.1	6.9	7.0	24.61	54.6	25.0	60.0	46.1	13.90	4.318 ES		
3,200.0	3,200.0	3,200.9	3,200.9	7.1	7.1	124.83	54.5	25.4	60.4	46.3	14.11	4.279 SF		
3,300.0	3,299.9	3,300.0	3,299.9	7.2	7.2	130.42	53.7	28.8	63.5	49.0	14.49	4.380		
3,400.0	3,399.7	3,398.2	3,397.9	7.4	7.4	139.78	52.2	35.5	71.2	56.3	14.86	4.789		
3,500.0	3,499.1	3,494.6	3,493.8	7.7	7.6	150.06	50.1	45.2	85.5	70.2	15.22	5.614		
3,600.0	3,598.2	3,588.8	3,587.1	7.9	7.8	159.01	47.3	57.7	107.4	91.8	15.57	6.897		
3,700.0	3,696.6	3,680.1	3,677.1	8.1	8.1	165.93	44.0	72.7	136.9	121.0	15.89	8.612		
3,800.0	3,794.4	3,768.1	3,763.3	8.4	8.3	171.01	40.2	89.8	173.5	157.3	16.20	10.707		
3,900.0	3,891.5	3,852.4	3,845.3	8.7	8.5	174.73	36.0	108.6	216.6	200.1	16.50	13.132		
3,960.1	3,949.3	3,900.0	3,891.5	8.9	8.7	176.45	33.4	120.3	245.5	228.8	16.66	14.731		
4,000.0	3,987.7	3,932.7	3,923.0	9.0	8.8	177.51	31.5	128.7	265.5	248.7	16.81	15.792		
4,100.0	4,083.7	4,010.2	3,997.3	9.4	9.0	179.63	26.8	150.1	317.6	300.4	17.19	18.472		
4,200.0	4,179.7	4,085.1	4,068.6	9.8	9.3	-178.72	21.8	172.7	372.0	354.4	17.57	21.167		
4,300.0	4,275.7	4,166.3	4,145.4	10.2	9.7	-177.29	16.1	198.3	427.9	410.0	17.98	23.805		
4,400.0	4,371.8	4,248.8	4,223.4	10.6	10.0	-176.17	10.3	224.4	484.0	465.6	18.38	26.329		
4,500.0	4,467.8	4,331.2	4,301.4	11.0	10.4	-175.28	4.5	250.5	540.2	521.4	18.80	28.735		
4,600.0	4,563.8	4,413.7	4,379.4	11.5	10.8	-174.55	-1.3	276.6	596.5	577.3	19.22	31.028		
4,700.0	4,659.9	4,496.1	4,457.4	12.0	11.2	-173.95	-7.1	302.7	652.8	633.1	19.66	33.212		
4,800.0	4,755.9	4,578.6	4,535.4	12.4	11.7	-173.45	-12.9	328.8	709.2	689.1	20.09	35.290		

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



# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 6-6H - 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		
4,900.0	4,851.9	4,661.0	4,613.4	12.9	12.1	-173.02	-18.7	354.9	765.5	745.0	20.54	37.270		
5,000.0	4,948.0	4,743.5	4,691.4	13.4	12.6	-172.65	-24.5	381.0	822.0	801.0	20.99	39.155		
5,100.0	5,044.0	4,825.9	4,769.4	13.9	13.0	-172.32	-30.3	407.1	878.4	857.0	21.45	40.951		
5,200.0	5,140.0	4,908.4	4,847.4	14.5	13.5	-172.04	-36.1	433.2	934.9	912.9	21.91	42.663		
5,300.0	5,236.0	4,990.9	4,925.4	15.0	14.0	-171.79	-41.9	459.3	991.3	968.9	22.38	44.293		
5,400.0	5,332.1	5,073.3	5,003.4	15.5	14.4	-171.56	-47.7	485.4	1,047.8	1,025.0	22.85	45.847		
5,500.0	5,428.1	5,155.8	5,081.4	16.0	14.9	-171.36	-53.5	511.5	1,104.3	1,081.0	23.33	47.328		
5,600.0	5,524.1	5,238.2	5,159.4	16.6	15.4	-171.18	-59.3	537.6	1,160.8	1,137.0	23.81	48.743		
5,700.0	5,620.2	5,320.7	5,237.4	17.1	15.9	-171.01	-65.1	563.7	1,217.3	1,193.0	24.30	50.093		
5,732.4	5,651.3	5,347.4	5,262.7	17.3	16.1	-170.96	-67.0	572.1	1,235.6	1,211.2	24.46	50.517		
5,750.0	5,668.2	5,361.9	5,276.4	17.4	16.2	-176.72	-68.0	576.7	1,245.6	1,221.0	24.54	50.752		
5,800.0	5,716.1	5,402.7	5,315.1	17.6	16.4	167.44	-70.9	589.6	1,274.1	1,249.3	24.82	51.336		
5,850.0	5,763.8	5,442.9	5,353.1	17.9	16.7	153.36	-73.7	602.3	1,302.8	1,277.7	25.16	51.786		
5,900.0	5,810.9	5,482.3	5,390.4	18.1	16.9	141.56	-76.5	614.8	1,331.7	1,306.1	25.56	52.109		
5,950.0	5,857.3	5,520.7	5,426.6	18.4	17.2	131.90	-79.2	627.0	1,360.6	1,334.6	26.01	52.315		
6,000.0	5,902.8	5,557.9	5,461.8	18.6	17.4	124.01	-81.8	638.7	1,389.6	1,363.0	26.51	52.420		
6,050.0	5,947.0	5,593.6	5,495.7	18.9	17.6	117.48	-84.3	650.0	1,418.5	1,391.4	27.05	52.444		
6,100.0	5,989.8	5,627.9	5,528.0	19.1	17.8	111.99	-86.7	660.9	1,447.4	1,419.7	27.62	52.405		
6,150.0	6,031.0	5,660.3	5,558.8	19.4	18.0	107.28	-89.0	671.2	1,476.2	1,448.0	28.21	52.324		
6,200.0	6,070.4	5,691.0	5,587.7	19.6	18.2	103.16	-91.2	680.8	1,504.9	1,476.1	28.82	52.220		
6,250.0	6,107.8	5,719.5	5,614.8	19.9	18.4	99.49	-93.2	689.9	1,533.5	1,504.1	29.43	52.112		
6,300.0	6,143.0	5,745.9	5,639.7	20.2	18.6	96.16	-95.0	698.2	1,562.1	1,532.0	30.03	52.019		
6,350.0	6,175.8	5,772.0	5,664.4	20.5	18.7	93.16	-96.6	706.5	1,590.4	1,559.8	30.60	51.972		
6,400.0	6,206.1	5,798.5	5,689.5	20.8	18.9	90.45	-97.2	715.0	1,618.6	1,587.5	31.14	51.974		
6,450.0	6,233.8	5,825.4	5,714.9	21.1	19.0	88.00	-96.8	723.8	1,646.5	1,614.9	31.63	52.056		
6,472.1	6,245.1	5,837.5	5,726.3	21.3	19.1	87.00	-96.3	727.7	1,658.7	1,626.9	31.83	52.112		
6,500.0	6,259.0	5,853.4	5,741.3	21.5	19.2	87.56	-95.4	733.0	1,674.2	1,642.1	32.13	52.114		
6,600.0	6,309.0	5,922.1	5,805.6	22.3	19.6	89.83	-87.2	755.8	1,731.1	1,697.9	33.20	52.146		
6,622.1	6,320.1	5,940.3	5,822.4	22.5	19.7	90.40	-84.0	761.9	1,744.0	1,710.5	33.44	52.157		
6,650.0	6,333.6	5,964.7	5,844.8	22.7	19.8	88.66	-78.9	770.0	1,759.9	1,726.4	33.55	52.460		
6,700.0	6,355.3	6,012.2	5,887.9	23.2	20.0	86.12	-66.8	786.0	1,787.0	1,753.3	33.64	53.119		
6,750.0	6,373.7	6,066.1	5,935.5	23.6	20.3	84.27	-49.4	804.1	1,812.0	1,778.3	33.64	53.862		
6,800.0	6,388.7	6,128.7	5,989.1	24.0	20.6	83.09	-24.4	824.9	1,834.6	1,801.0	33.61	54.589		
6,850.0	6,400.1	6,203.6	6,049.8	24.5	21.0	82.61	11.9	849.4	1,854.8	1,821.2	33.63	55.158		
6,900.0	6,407.9	6,295.8	6,118.8	24.9	21.4	82.85	65.5	878.5	1,872.1	1,838.3	33.82	55.362		
6,913.9	6,409.5	6,325.4	6,139.4	25.1	21.5	83.04	84.7	887.5	1,876.3	1,842.4	33.92	55.314		
7,000.0	6,418.0	6,521.4	6,254.5	25.9	22.5	86.34	232.9	942.0	1,899.7	1,863.8	35.90	52.922		
7,100.0	6,428.0	7,132.0	6,429.2	26.9	26.6	90.00	799.6	1,014.1	1,906.3	1,863.2	43.02	44.316		
7,200.0	6,437.9	7,232.0	6,439.1	28.1	27.5	90.00	899.1	1,014.1	1,906.2	1,860.5	45.77	41.644		
7,300.0	6,447.8	7,332.0	6,449.1	29.3	28.6	90.00	998.6	1,014.1	1,906.2	1,857.5	48.68	39.157		
7,400.0	6,457.7	7,432.0	6,459.0	30.6	29.7	90.00	1,098.1	1,014.0	1,906.2	1,854.5	51.71	36.862		
7,500.0	6,467.7	7,532.0	6,468.9	32.0	31.0	90.00	1,197.6	1,014.0	1,906.1	1,851.3	54.84	34.757		
7,600.0	6,477.6	7,632.0	6,478.9	33.5	32.3	90.00	1,297.1	1,014.0	1,906.1	1,848.0	58.06	32.830		
7,700.0	6,487.5	7,732.0	6,488.8	35.0	33.7	90.00	1,396.6	1,013.9	1,906.1	1,844.7	61.35	31.069		
7,800.0	6,497.5	7,832.0	6,498.7	36.5	35.1	90.00	1,496.2	1,013.9	1,906.0	1,841.3	64.70	29.460		
7,900.0	6,507.4	7,932.0	6,508.7	38.0	36.6	90.00	1,595.7	1,013.9	1,906.0	1,837.9	68.10	27.987		
8,000.0	6,517.3	8,032.0	6,518.6	39.6	38.1	90.00	1,695.2	1,013.8	1,906.0	1,834.4	71.55	26.638		
8,100.0	6,527.3	8,132.0	6,528.5	41.3	39.7	90.00	1,794.7	1,013.8	1,905.9	1,830.9	75.04	25.400		
8,200.0	6,537.2	8,232.0	6,538.4	42.9	41.3	90.00	1,894.2	1,013.7	1,905.9	1,827.3	78.56	24.262		
8,300.0	6,547.1	8,332.0	6,548.4	44.6	42.9	90.00	1,993.7	1,013.7	1,905.9	1,823.8	82.10	23.213		
8,400.0	6,557.1	8,432.0	6,558.3	46.3	44.6	90.00	2,093.2	1,013.7	1,905.8	1,820.1	85.68	22.244		
8,500.0	6,567.0	8,532.0	6,568.2	48.0	46.2	90.00	2,192.7	1,013.6	1,905.8	1,816.5	89.27	21.347		

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



# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 6-6H - 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		
8,600.0	6,576.9	8,632.0	6,578.2	49.7	47.9	90.00	2,292.2	1,013.6	1,905.8	1,812.9	92.89	20.516		
8,700.0	6,586.9	8,732.0	6,588.1	51.5	49.6	90.00	2,391.7	1,013.6	1,905.7	1,809.2	96.52	19.743		
8,800.0	6,596.8	8,832.0	6,598.0	53.2	51.4	90.00	2,491.2	1,013.5	1,905.7	1,805.5	100.17	19.024		
8,900.0	6,606.7	8,932.0	6,608.0	55.0	53.1	90.00	2,590.7	1,013.5	1,905.7	1,801.8	103.84	18.352		
9,000.0	6,616.7	9,032.0	6,617.9	56.8	54.9	90.00	2,690.2	1,013.5	1,905.6	1,798.1	107.51	17.725		
9,100.0	6,626.6	9,132.0	6,627.8	58.5	56.6	90.00	2,789.7	1,013.4	1,905.6	1,794.4	111.20	17.137		
9,200.0	6,636.5	9,232.0	6,637.8	60.3	58.4	90.00	2,889.2	1,013.4	1,905.6	1,790.7	114.90	16.585		
9,300.0	6,646.5	9,332.0	6,647.7	62.1	60.2	90.00	2,988.7	1,013.4	1,905.5	1,786.9	118.60	16.066		
9,400.0	6,656.4	9,432.0	6,657.6	63.9	62.0	90.00	3,088.2	1,013.3	1,905.5	1,783.2	122.32	15.578		
9,500.0	6,666.3	9,532.0	6,667.6	65.7	63.8	90.00	3,187.7	1,013.3	1,905.5	1,779.4	126.04	15.118		
9,600.0	6,676.3	9,632.0	6,677.5	67.6	65.6	90.00	3,287.3	1,013.3	1,905.4	1,775.7	129.77	14.683		
9,700.0	6,686.2	9,732.0	6,687.4	69.4	67.4	90.00	3,386.8	1,013.2	1,905.4	1,771.9	133.51	14.272		
9,800.0	6,696.1	9,832.0	6,697.4	71.2	69.2	90.00	3,486.3	1,013.2	1,905.4	1,768.1	137.25	13.882		
9,900.0	6,706.0	9,932.0	6,707.3	73.1	71.1	90.00	3,585.8	1,013.2	1,905.3	1,764.3	141.00	13.513		
10,000.0	6,716.0	10,032.0	6,717.2	74.9	72.9	90.00	3,685.3	1,013.1	1,905.3	1,760.5	144.75	13.163		
10,100.0	6,725.9	10,132.0	6,727.2	76.7	74.7	90.00	3,784.8	1,013.1	1,905.3	1,756.8	148.51	12.829		
10,200.0	6,735.8	10,232.0	6,737.1	78.6	76.6	90.00	3,884.3	1,013.1	1,905.2	1,753.0	152.27	12.512		
10,300.0	6,745.8	10,332.0	6,747.0	80.4	78.4	90.00	3,983.8	1,013.0	1,905.2	1,749.2	156.03	12.210		
10,400.0	6,755.7	10,432.0	6,757.0	82.3	80.3	90.00	4,083.3	1,013.0	1,905.2	1,745.4	159.80	11.922		
10,500.0	6,765.6	10,532.0	6,766.9	84.1	82.1	90.00	4,182.8	1,013.0	1,905.1	1,741.5	163.58	11.647		
10,600.0	6,775.6	10,632.0	6,776.8	86.0	84.0	90.00	4,282.3	1,012.9	1,905.1	1,737.7	167.35	11.384		
10,700.0	6,785.5	10,732.0	6,786.7	87.9	85.8	90.00	4,381.8	1,012.9	1,905.1	1,733.9	171.13	11.132		
10,800.0	6,795.4	10,832.0	6,796.7	89.7	87.7	90.00	4,481.3	1,012.9	1,905.0	1,730.1	174.91	10.891		
10,900.0	6,805.4	10,932.0	6,806.6	91.6	89.6	90.00	4,580.8	1,012.8	1,905.0	1,726.3	178.70	10.660		
11,000.0	6,815.3	11,032.0	6,816.5	93.5	91.4	90.00	4,680.3	1,012.8	1,905.0	1,722.5	182.48	10.439		
11,100.0	6,825.2	11,132.0	6,826.5	95.3	93.3	90.00	4,779.8	1,012.8	1,904.9	1,718.7	186.27	10.227		
11,200.0	6,835.2	11,232.0	6,836.4	97.2	95.2	90.00	4,879.3	1,012.7	1,904.9	1,714.8	190.06	10.022		
11,300.0	6,845.1	11,332.0	6,846.3	99.1	97.0	90.00	4,978.8	1,012.7	1,904.9	1,711.0	193.86	9.826		
11,400.0	6,855.0	11,432.0	6,856.3	101.0	98.9	90.00	5,078.4	1,012.7	1,904.8	1,707.2	197.65	9.637		
11,500.0	6,865.0	11,532.0	6,866.2	102.8	100.8	90.00	5,177.9	1,012.6	1,904.8	1,703.3	201.45	9.455		
11,600.0	6,874.9	11,632.0	6,876.1	104.7	102.7	90.00	5,277.4	1,012.6	1,904.8	1,699.5	205.25	9.280		
11,700.0	6,884.8	11,732.0	6,886.1	106.6	104.6	90.00	5,376.9	1,012.6	1,904.7	1,695.7	209.05	9.111		
11,800.0	6,894.8	11,832.0	6,896.0	108.5	106.4	90.00	5,476.4	1,012.5	1,904.7	1,691.8	212.85	8.949		
11,900.0	6,904.7	11,932.0	6,905.9	110.4	108.3	90.00	5,575.9	1,012.5	1,904.7	1,688.0	216.65	8.791		
12,000.0	6,914.6	12,032.0	6,915.9	112.3	110.2	90.00	5,675.4	1,012.5	1,904.6	1,684.2	220.46	8.639		
12,100.0	6,924.6	12,132.0	6,925.8	114.1	112.1	90.00	5,774.9	1,012.4	1,904.6	1,680.3	224.26	8.493		
12,200.0	6,934.5	12,232.0	6,935.7	116.0	114.0	90.00	5,874.4	1,012.4	1,904.6	1,676.5	228.07	8.351		
12,300.0	6,944.4	12,332.0	6,945.7	117.9	115.9	90.00	5,973.9	1,012.4	1,904.5	1,672.6	231.88	8.213		
12,336.4	6,948.0	12,368.4	6,949.3	118.5	116.5	90.00	6,010.1	1,012.3	1,904.5	1,671.4	233.13	8.169		
12,336.7	6,948.1	12,368.6	6,949.3	118.5	116.6	90.00	6,010.3	1,012.3	1,904.5	1,671.4	233.14	8.169		

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 7-6H - 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	1.0	1.0	0.0	0.0	24.59	41.0	18.7	45.0					
100.0	100.0	101.0	101.0	0.1	0.1	24.59	41.0	18.7	45.0	44.9	0.19	235.766		
200.0	200.0	201.0	201.0	0.3	0.3	24.59	41.0	18.7	45.0	44.4	0.64	70.316		
300.0	300.0	301.0	301.0	0.5	0.5	24.59	41.0	18.7	45.0	44.0	1.09	41.320		
400.0	400.0	401.0	401.0	0.8	0.8	24.59	41.0	18.7	45.0	43.5	1.54	29.256		
500.0	500.0	501.0	501.0	1.0	1.0	24.59	41.0	18.7	45.0	43.1	1.99	22.644		
600.0	600.0	601.0	601.0	1.2	1.2	24.59	41.0	18.7	45.0	42.6	2.44	18.470		
700.0	700.0	701.0	701.0	1.4	1.4	24.59	41.0	18.7	45.0	42.2	2.89	15.595		
800.0	800.0	801.0	801.0	1.7	1.7	24.59	41.0	18.7	45.0	41.7	3.34	13.495		
900.0	900.0	901.0	901.0	1.9	1.9	24.59	41.0	18.7	45.0	41.3	3.79	11.893		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	24.59	41.0	18.7	45.0	40.8	4.24	10.631		
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	24.59	41.0	18.7	45.0	40.4	4.69	9.612		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	24.59	41.0	18.7	45.0	39.9	5.14	8.770		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	24.59	41.0	18.7	45.0	39.5	5.59	8.064		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	24.59	41.0	18.7	45.0	39.0	6.03	7.464		
1,500.0	1,500.0	1,501.0	1,501.0	3.2	3.2	24.59	41.0	18.7	45.0	38.6	6.48	6.946		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	24.59	41.0	18.7	45.0	38.1	6.93	6.496		
1,700.0	1,700.0	1,701.0	1,701.0	3.7	3.7	24.59	41.0	18.7	45.0	37.7	7.38	6.100		
1,800.0	1,800.0	1,801.0	1,801.0	3.9	3.9	24.59	41.0	18.7	45.0	37.2	7.83	5.750		
1,900.0	1,900.0	1,901.0	1,901.0	4.1	4.1	24.59	41.0	18.7	45.0	36.8	8.28	5.438		
2,000.0	2,000.0	2,001.0	2,001.0	4.4	4.4	24.59	41.0	18.7	45.0	36.3	8.73	5.158		
2,100.0	2,100.0	2,101.0	2,101.0	4.6	4.6	24.59	41.0	18.7	45.0	35.9	9.18	4.906		
2,200.0	2,200.0	2,201.0	2,201.0	4.8	4.8	24.59	41.0	18.7	45.0	35.4	9.63	4.677		
2,300.0	2,300.0	2,301.0	2,301.0	5.0	5.0	24.59	41.0	18.7	45.0	35.0	10.08	4.468		
2,400.0	2,400.0	2,401.0	2,401.0	5.3	5.3	24.59	41.0	18.7	45.0	34.5	10.53	4.278		
2,500.0	2,500.0	2,501.0	2,501.0	5.5	5.5	24.59	41.0	18.7	45.0	34.1	10.98	4.102		
2,600.0	2,600.0	2,601.0	2,601.0	5.7	5.7	24.59	41.0	18.7	45.0	33.6	11.43	3.941		
2,700.0	2,700.0	2,701.0	2,701.0	5.9	5.9	24.59	41.0	18.7	45.0	33.2	11.88	3.792		
2,800.0	2,800.0	2,801.0	2,801.0	6.2	6.2	24.59	41.0	18.7	45.0	32.7	12.33	3.654		
2,866.3	2,866.3	2,867.3	2,867.3	6.3	6.3	24.59	41.0	18.7	45.0	32.4	12.63	3.567 CC		
2,900.0	2,900.0	2,901.0	2,901.0	6.4	6.4	24.59	41.0	18.7	45.0	32.3	12.78	3.525 ES		
3,000.0	3,000.0	3,000.4	3,000.4	6.6	6.6	26.67	40.8	20.5	45.7	32.5	13.21	3.457 SF		
3,100.0	3,100.0	3,100.0	3,099.8	6.8	6.8	32.48	40.4	25.7	47.9	34.2	13.63	3.511		
3,150.0	3,150.0	3,149.1	3,148.7	6.9	6.9	36.41	40.0	29.5	49.8	35.9	13.84	3.597		
3,200.0	3,200.0	3,198.3	3,197.7	7.1	7.0	140.52	39.6	34.2	52.8	38.7	14.05	3.757		
3,300.0	3,299.9	3,295.8	3,294.5	7.2	7.2	151.04	38.6	45.9	63.7	49.3	14.44	4.416		
3,400.0	3,399.7	3,391.4	3,388.9	7.4	7.4	160.41	37.3	60.6	82.2	67.4	14.81	5.553		
3,500.0	3,499.1	3,484.5	3,480.4	7.7	7.7	167.41	35.8	77.9	108.3	93.2	15.17	7.144		
3,600.0	3,598.2	3,574.6	3,568.4	7.9	7.9	172.29	34.2	97.5	141.6	126.1	15.50	9.132		
3,700.0	3,696.6	3,661.2	3,652.3	8.1	8.2	175.68	32.3	118.9	181.4	165.6	15.83	11.463		
3,800.0	3,794.4	3,744.0	3,731.8	8.4	8.5	178.08	30.3	141.7	227.4	211.2	16.13	14.093		
3,900.0	3,891.5	3,828.1	3,812.2	8.7	8.8	179.89	28.2	166.5	278.4	261.9	16.43	16.939		
3,960.1	3,949.3	3,878.7	3,860.5	8.9	9.0	-179.27	26.9	181.5	310.5	293.9	16.60	18.702		
4,000.0	3,987.7	3,912.1	3,892.4	9.0	9.1	-178.81	26.1	191.4	332.3	315.6	16.76	19.832		
4,100.0	4,083.7	3,995.7	3,972.2	9.4	9.5	-177.89	23.9	216.2	386.9	369.7	17.15	22.564		
4,200.0	4,179.7	4,079.4	4,052.1	9.8	9.9	-177.19	21.8	240.9	441.5	423.9	17.54	25.164		
4,300.0	4,275.7	4,163.1	4,132.0	10.2	10.2	-176.65	19.6	265.7	496.1	478.2	17.95	27.640		
4,400.0	4,371.8	4,246.7	4,211.9	10.6	10.6	-176.21	17.5	290.5	550.8	532.5	18.36	29.995		
4,500.0	4,467.8	4,330.4	4,291.8	11.0	11.1	-175.85	15.4	315.2	605.5	586.7	18.78	32.235		
4,600.0	4,563.8	4,414.1	4,371.7	11.5	11.5	-175.55	13.2	340.0	660.2	641.0	19.21	34.367		
4,700.0	4,659.9	4,497.7	4,451.5	12.0	11.9	-175.30	11.1	364.8	715.0	695.3	19.64	36.395		
4,800.0	4,755.9	4,581.4	4,531.4	12.4	12.3	-175.08	8.9	389.5	769.7	749.6	20.08	38.324		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 7-6H - 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		
4,900.0	4,851.9	4,665.0	4,611.3	12.9	12.8	-174.89	6.8	414.3	824.4	803.9	20.53	40.161		
5,000.0	4,948.0	4,748.7	4,691.2	13.4	13.2	-174.73	4.7	439.1	879.2	858.2	20.98	41.910		
5,100.0	5,044.0	4,832.4	4,771.1	13.9	13.7	-174.58	2.5	463.9	933.9	912.5	21.43	43.576		
5,200.0	5,140.0	4,916.0	4,850.9	14.5	14.2	-174.46	0.4	488.6	988.7	966.8	21.89	45.165		
5,300.0	5,236.0	4,999.7	4,930.8	15.0	14.6	-174.34	-1.7	513.4	1,043.4	1,021.1	22.35	46.679		
5,400.0	5,332.1	5,083.3	5,010.7	15.5	15.1	-174.24	-3.9	538.2	1,098.2	1,075.3	22.82	48.123		
5,500.0	5,428.1	5,167.0	5,090.6	16.0	15.6	-174.14	-6.0	562.9	1,152.9	1,129.6	23.29	49.502		
5,600.0	5,524.1	5,250.7	5,170.5	16.6	16.0	-174.05	-8.2	587.7	1,207.7	1,183.9	23.76	50.818		
5,700.0	5,620.2	5,334.3	5,250.4	17.1	16.5	-173.98	-10.3	612.5	1,262.4	1,238.2	24.24	52.076		
5,732.4	5,651.3	5,361.5	5,276.3	17.3	16.7	-173.95	-11.0	620.5	1,280.2	1,255.8	24.40	52.472		
5,750.0	5,668.2	5,376.1	5,290.3	17.4	16.8	-179.68	-11.4	624.8	1,289.8	1,265.4	24.49	52.678		
5,800.0	5,716.1	5,417.7	5,330.0	17.6	17.0	164.56	-12.4	637.2	1,317.4	1,292.6	24.78	53.165		
5,850.0	5,763.8	5,458.8	5,369.2	17.9	17.2	150.59	-13.5	649.3	1,344.9	1,319.8	25.13	53.514		
5,900.0	5,810.9	5,499.3	5,407.9	18.1	17.5	138.92	-14.5	661.3	1,372.5	1,347.0	25.54	53.738		
5,950.0	5,857.3	5,538.8	5,445.6	18.4	17.7	129.43	-15.5	673.0	1,400.0	1,374.0	26.00	53.855		
6,000.0	5,902.8	5,577.4	5,482.4	18.6	17.9	121.72	-16.5	684.4	1,427.3	1,400.8	26.49	53.888		
6,050.0	5,947.0	5,614.6	5,518.0	18.9	18.2	115.40	-17.5	695.4	1,454.5	1,427.5	27.01	53.859		
6,100.0	5,989.8	5,650.5	5,552.2	19.1	18.4	110.14	-18.4	706.1	1,481.5	1,454.0	27.55	53.786		
6,150.0	6,031.0	5,676.4	5,577.0	19.4	18.5	105.45	-19.0	713.7	1,508.4	1,480.3	28.10	53.675		
6,200.0	6,070.4	5,689.4	5,589.4	19.6	18.6	101.00	-19.4	717.7	1,535.4	1,506.7	28.68	53.532		
6,250.0	6,107.8	5,700.0	5,599.4	19.9	18.7	96.94	-19.7	721.1	1,562.6	1,533.3	29.26	53.402		
6,300.0	6,143.0	5,700.0	5,599.4	20.2	18.7	92.90	-19.7	721.1	1,589.9	1,560.1	29.83	53.305		
6,350.0	6,175.8	5,700.0	5,599.4	20.5	18.7	89.15	-19.7	721.1	1,617.4	1,587.1	30.35	53.296		
6,400.0	6,206.1	5,721.9	5,620.0	20.8	18.8	86.45	-20.3	728.6	1,644.4	1,613.6	30.81	53.364		
6,450.0	6,233.8	5,727.9	5,625.6	21.1	18.9	83.44	-20.5	730.7	1,671.4	1,640.2	31.21	53.554		
6,472.1	6,245.1	5,730.3	5,627.8	21.3	18.9	82.18	-20.6	731.6	1,683.3	1,651.9	31.36	53.677		
6,500.0	6,259.0	5,750.0	5,646.0	21.5	19.0	82.90	-21.2	739.1	1,698.7	1,667.0	31.69	53.594		
6,600.0	6,309.0	5,750.0	5,646.0	22.3	19.0	82.90	-21.2	739.1	1,755.0	1,722.2	32.85	53.422		
6,622.1	6,320.1	5,750.0	5,646.0	22.5	19.0	82.90	-21.2	739.1	1,768.0	1,734.8	33.12	53.378		
6,650.0	6,333.6	5,750.0	5,646.0	22.7	19.0	80.57	-21.2	739.1	1,784.2	1,751.1	33.11	53.888		
6,700.0	6,355.3	5,750.0	5,646.0	23.2	19.0	76.87	-21.2	739.1	1,812.1	1,779.1	32.94	55.010		
6,750.0	6,373.7	5,750.0	5,646.0	23.6	19.0	73.74	-21.2	739.1	1,838.2	1,805.6	32.62	56.347		
6,800.0	6,388.7	5,750.0	5,646.0	24.0	19.0	71.13	-21.2	739.1	1,862.4	1,830.2	32.20	57.836		
6,850.0	6,400.1	5,750.0	5,646.0	24.5	19.0	68.98	-21.2	739.1	1,884.7	1,853.0	31.73	59.403		
6,900.0	6,407.9	5,750.0	5,646.0	24.9	19.0	67.25	-21.2	739.1	1,904.9	1,873.6	31.25	60.965		
6,913.9	6,409.5	5,750.0	5,646.0	25.1	19.0	66.85	-21.2	739.1	1,910.1	1,879.0	31.12	61.385		
7,000.0	6,418.0	5,750.0	5,646.0	25.9	19.0	66.85	-21.2	739.1	1,943.7	1,911.5	32.15	60.458		
7,100.0	6,428.0	5,750.0	5,646.0	26.9	19.0	66.85	-21.2	739.1	1,986.6	1,953.2	33.41	59.469		
7,200.0	6,437.9	5,750.0	5,646.0	28.1	19.0	66.85	-21.2	739.1	2,033.6	1,998.8	34.74	58.541		
7,300.0	6,447.8	5,750.0	5,646.0	29.3	19.0	66.85	-21.2	739.1	2,084.3	2,048.1	36.13	57.686		
7,400.0	6,457.7	5,769.1	5,663.5	30.6	19.2	67.46	-21.9	746.8	2,138.1	2,100.4	37.75	56.643		
7,500.0	6,467.7	5,770.6	5,664.8	32.0	19.2	67.51	-21.9	747.4	2,195.5	2,156.2	39.25	55.929		
7,600.0	6,477.6	5,772.0	5,666.1	33.5	19.2	67.56	-22.0	748.0	2,255.8	2,215.0	40.80	55.290		
7,700.0	6,487.5	5,773.5	5,667.5	35.0	19.2	67.60	-22.1	748.6	2,318.9	2,276.5	42.38	54.723		
7,800.0	6,497.5	5,774.9	5,668.8	36.5	19.2	67.65	-22.1	749.2	2,384.5	2,340.5	43.98	54.221		
7,900.0	6,507.4	5,776.4	5,670.1	38.0	19.2	67.70	-22.2	749.9	2,452.4	2,406.8	45.60	53.778		
8,000.0	6,517.3	5,777.8	5,671.3	39.6	19.2	67.74	-22.2	750.5	2,522.5	2,475.2	47.25	53.389		
8,100.0	6,527.3	5,891.9	6,542.2	41.3	46.9	90.31	1,793.4	1,673.9	2,566.0	2,491.0	75.05	34.190		
8,200.0	6,537.2	8,691.9	6,552.2	42.9	48.0	90.31	1,892.9	1,673.8	2,566.0	2,487.5	78.53	32.674		
8,300.0	6,547.1	8,791.9	6,562.1	44.6	49.2	90.31	1,992.4	1,673.8	2,566.0	2,483.9	82.05	31.274		
8,400.0	6,557.1	8,891.9	6,572.0	46.3	50.5	90.31	2,091.9	1,673.8	2,566.0	2,480.4	85.59	29.980		
8,500.0	6,567.0	8,991.9	6,582.0	48.0	51.8	90.31	2,191.4	1,673.8	2,565.9	2,476.8	89.16	28.780		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 7-6H - 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		
8,600.0	6,576.9	9,091.9	6,591.9	49.7	53.1	90.31	2,290.9	1,673.7	2,565.9	2,473.2	92.75	27.666		
8,700.0	6,586.9	9,191.9	6,601.8	51.5	54.5	90.31	2,390.4	1,673.7	2,565.9	2,469.5	96.36	26.629		
8,800.0	6,596.8	9,291.9	6,611.7	53.2	56.0	90.31	2,489.9	1,673.7	2,565.9	2,465.9	99.98	25.663		
8,900.0	6,606.7	9,391.9	6,621.7	55.0	57.4	90.31	2,589.4	1,673.6	2,565.8	2,462.2	103.63	24.761		
9,000.0	6,616.7	9,491.9	6,631.6	56.8	58.9	90.31	2,688.9	1,673.6	2,565.8	2,458.5	107.28	23.917		
9,100.0	6,626.6	9,591.9	6,641.5	58.5	60.5	90.31	2,788.4	1,673.6	2,565.8	2,454.8	110.95	23.125		
9,200.0	6,636.5	9,691.9	6,651.5	60.3	62.1	90.31	2,887.9	1,673.6	2,565.7	2,451.1	114.63	22.383		
9,300.0	6,646.5	9,791.9	6,661.4	62.1	63.6	90.31	2,987.4	1,673.5	2,565.7	2,447.4	118.32	21.684		
9,400.0	6,656.4	9,891.9	6,671.3	63.9	65.3	90.31	3,086.9	1,673.5	2,565.7	2,443.7	122.02	21.027		
9,500.0	6,666.3	9,991.9	6,681.3	65.7	66.9	90.31	3,186.4	1,673.5	2,565.7	2,439.9	125.73	20.406		
9,600.0	6,676.3	10,091.9	6,691.2	67.6	68.6	90.31	3,285.9	1,673.4	2,565.6	2,436.2	129.45	19.820		
9,700.0	6,686.2	10,191.9	6,701.1	69.4	70.2	90.31	3,385.5	1,673.4	2,565.6	2,432.4	133.17	19.266		
9,800.0	6,696.1	10,291.9	6,711.1	71.2	71.9	90.31	3,485.0	1,673.4	2,565.6	2,428.7	136.90	18.741		
9,900.0	6,706.0	10,391.9	6,721.0	73.1	73.6	90.31	3,584.5	1,673.4	2,565.6	2,424.9	140.64	18.242		
10,000.0	6,716.0	10,491.9	6,730.9	74.9	75.3	90.31	3,684.0	1,673.3	2,565.5	2,421.2	144.38	17.769		
10,100.0	6,725.9	10,591.9	6,740.9	76.7	77.1	90.31	3,783.5	1,673.3	2,565.5	2,417.4	148.13	17.320		
10,200.0	6,735.8	10,691.9	6,750.8	78.6	78.8	90.31	3,883.0	1,673.3	2,565.5	2,413.6	151.88	16.892		
10,300.0	6,745.8	10,791.9	6,760.7	80.4	80.6	90.31	3,982.5	1,673.3	2,565.4	2,409.8	155.63	16.484		
10,400.0	6,755.7	10,891.9	6,770.7	82.3	82.3	90.31	4,082.0	1,673.2	2,565.4	2,406.0	159.39	16.095		
10,500.0	6,765.6	10,991.9	6,780.6	84.1	84.1	90.31	4,181.5	1,673.2	2,565.4	2,402.2	163.16	15.723		
10,600.0	6,775.6	11,091.9	6,790.5	86.0	85.9	90.31	4,281.0	1,673.2	2,565.4	2,398.4	166.93	15.368		
10,700.0	6,785.5	11,191.9	6,800.5	87.9	87.7	90.31	4,380.5	1,673.1	2,565.3	2,394.6	170.70	15.028		
10,800.0	6,795.4	11,291.9	6,810.4	89.7	89.4	90.31	4,480.0	1,673.1	2,565.3	2,390.8	174.47	14.703		
10,900.0	6,805.4	11,391.9	6,820.3	91.6	91.2	90.31	4,579.5	1,673.1	2,565.3	2,387.0	178.25	14.391		
11,000.0	6,815.3	11,491.9	6,830.3	93.5	93.0	90.31	4,679.0	1,673.1	2,565.3	2,383.2	182.03	14.092		
11,100.0	6,825.2	11,591.9	6,840.2	95.3	94.9	90.31	4,778.5	1,673.0	2,565.2	2,379.4	185.81	13.805		
11,200.0	6,835.2	11,691.9	6,850.1	97.2	96.7	90.31	4,878.0	1,673.0	2,565.2	2,375.6	189.60	13.530		
11,300.0	6,845.1	11,791.9	6,860.0	99.1	98.5	90.31	4,977.5	1,673.0	2,565.2	2,371.8	193.39	13.265		
11,400.0	6,855.0	11,891.9	6,870.0	101.0	100.3	90.31	5,077.0	1,672.9	2,565.1	2,368.0	197.17	13.010		
11,500.0	6,865.0	11,991.9	6,879.9	102.8	102.1	90.31	5,176.6	1,672.9	2,565.1	2,364.2	200.97	12.764		
11,600.0	6,874.9	12,091.9	6,889.8	104.7	104.0	90.31	5,276.1	1,672.9	2,565.1	2,360.3	204.76	12.527		
11,700.0	6,884.8	12,191.9	6,899.8	106.6	105.8	90.31	5,375.6	1,672.9	2,565.1	2,356.5	208.55	12.299		
11,800.0	6,894.8	12,291.9	6,909.7	108.5	107.6	90.31	5,475.1	1,672.8	2,565.0	2,352.7	212.35	12.079		
11,900.0	6,904.7	12,391.9	6,919.6	110.4	109.5	90.31	5,574.6	1,672.8	2,565.0	2,348.9	216.15	11.867		
12,000.0	6,914.6	12,491.9	6,929.6	112.3	111.3	90.31	5,674.1	1,672.8	2,565.0	2,345.0	219.95	11.662		
12,100.0	6,924.6	12,591.9	6,939.5	114.1	113.2	90.31	5,773.6	1,672.7	2,565.0	2,341.2	223.75	11.463		
12,200.0	6,934.5	12,691.9	6,949.4	116.0	115.0	90.31	5,873.1	1,672.7	2,564.9	2,337.4	227.55	11.272		
12,300.0	6,944.4	12,791.9	6,959.4	117.9	116.9	90.31	5,972.6	1,672.7	2,564.9	2,333.5	231.36	11.086		
12,336.4	6,948.0	12,828.3	6,963.0	118.5	117.5	90.31	6,008.8	1,672.7	2,564.9	2,332.3	232.61	11.027		
12,336.7	6,948.1	12,828.6	6,963.0	118.5	117.6	90.31	6,009.1	1,672.7	2,564.9	2,332.3	232.62	11.026		

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 8-6H - 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	1.0	1.0	0.0	0.0	24.39	27.4	12.4	30.1					
100.0	100.0	101.0	101.0	0.1	0.1	24.39	27.4	12.4	30.1	29.9	0.19	157.532		
200.0	200.0	201.0	201.0	0.3	0.3	24.39	27.4	12.4	30.1	29.5	0.64	46.983		
300.0	300.0	301.0	301.0	0.5	0.5	24.39	27.4	12.4	30.1	29.0	1.09	27.609		
400.0	400.0	401.0	401.0	0.8	0.8	24.39	27.4	12.4	30.1	28.6	1.54	19.548		
500.0	500.0	501.0	501.0	1.0	1.0	24.39	27.4	12.4	30.1	28.1	1.99	15.130		
600.0	600.0	601.0	601.0	1.2	1.2	24.39	27.4	12.4	30.1	27.7	2.44	12.341		
700.0	700.0	701.0	701.0	1.4	1.4	24.39	27.4	12.4	30.1	27.2	2.89	10.420		
800.0	800.0	801.0	801.0	1.7	1.7	24.39	27.4	12.4	30.1	26.8	3.34	9.017		
900.0	900.0	901.0	901.0	1.9	1.9	24.39	27.4	12.4	30.1	26.3	3.79	7.947		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	24.39	27.4	12.4	30.1	25.9	4.24	7.104		
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	24.39	27.4	12.4	30.1	25.4	4.69	6.422		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	24.39	27.4	12.4	30.1	25.0	5.14	5.860		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	24.39	27.4	12.4	30.1	24.5	5.59	5.388		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	24.39	27.4	12.4	30.1	24.1	6.03	4.987		
1,500.0	1,500.0	1,501.0	1,501.0	3.2	3.2	24.39	27.4	12.4	30.1	23.6	6.48	4.641		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	24.39	27.4	12.4	30.1	23.2	6.93	4.340		
1,700.0	1,700.0	1,701.0	1,701.0	3.7	3.7	24.39	27.4	12.4	30.1	22.7	7.38	4.076		
1,800.0	1,800.0	1,801.0	1,801.0	3.9	3.9	24.39	27.4	12.4	30.1	22.3	7.83	3.842		
1,900.0	1,900.0	1,901.0	1,901.0	4.1	4.1	24.39	27.4	12.4	30.1	21.8	8.28	3.634		
2,000.0	2,000.0	2,001.0	2,001.0	4.4	4.4	24.39	27.4	12.4	30.1	21.4	8.73	3.447		
2,100.0	2,100.0	2,101.0	2,101.0	4.6	4.6	24.39	27.4	12.4	30.1	20.9	9.18	3.278		
2,200.0	2,200.0	2,201.0	2,201.0	4.8	4.8	24.39	27.4	12.4	30.1	20.5	9.63	3.125		
2,300.0	2,300.0	2,301.0	2,301.0	5.0	5.0	24.39	27.4	12.4	30.1	20.0	10.08	2.986		
2,400.0	2,400.0	2,401.0	2,401.0	5.3	5.3	24.39	27.4	12.4	30.1	19.6	10.53	2.858		
2,466.3	2,466.3	2,467.3	2,467.3	5.4	5.4	24.39	27.4	12.4	30.1	19.3	10.83	2.779 CC		
2,500.0	2,500.0	2,501.0	2,501.0	5.5	5.5	24.39	27.4	12.4	30.1	19.1	10.98	2.741 ES		
2,600.0	2,600.0	2,600.5	2,600.5	5.7	5.7	27.38	27.4	14.2	30.9	19.5	11.41	2.705 SF		
2,700.0	2,700.0	2,700.0	2,699.8	5.9	5.9	35.30	27.4	19.4	33.6	21.8	11.84	2.839		
2,800.0	2,800.0	2,798.6	2,798.1	6.2	6.1	45.59	27.4	28.0	39.3	27.0	12.27	3.202		
2,900.0	2,900.0	2,896.7	2,895.4	6.4	6.3	55.48	27.4	39.9	48.7	36.0	12.71	3.832		
3,000.0	3,000.0	2,993.9	2,991.4	6.6	6.6	63.47	27.4	54.9	62.1	48.9	13.16	4.718		
3,100.0	3,100.0	3,089.9	3,085.8	6.8	6.8	69.41	27.4	73.0	79.4	65.8	13.64	5.823		
3,150.0	3,150.0	3,137.5	3,132.2	6.9	6.9	71.74	27.4	83.1	89.5	75.6	13.89	6.441		
3,200.0	3,200.0	3,184.5	3,178.0	7.1	7.1	173.18	27.4	93.8	100.8	86.9	13.97	7.217		
3,300.0	3,299.9	3,276.8	3,267.3	7.2	7.4	176.35	27.4	117.1	128.7	114.3	14.35	8.964		
3,400.0	3,399.7	3,366.1	3,352.9	7.4	7.7	178.62	27.4	142.3	163.0	148.3	14.72	11.074		
3,500.0	3,499.1	3,451.9	3,434.5	7.7	8.1	-179.76	27.4	169.1	203.6	188.5	15.07	13.505		
3,600.0	3,598.2	3,534.0	3,511.7	7.9	8.5	-178.59	27.4	197.0	250.0	234.6	15.40	16.228		
3,700.0	3,696.6	3,611.9	3,584.2	8.1	8.9	-177.73	27.4	225.5	301.9	286.2	15.72	19.209		
3,800.0	3,794.4	3,685.5	3,652.0	8.4	9.3	-177.07	27.4	254.2	359.0	343.0	16.01	22.423		
3,900.0	3,891.5	3,757.8	3,717.8	8.7	9.8	-176.53	27.4	284.1	420.9	404.6	16.29	25.837		
3,960.1	3,949.3	3,799.8	3,755.8	8.9	10.0	-176.25	27.4	302.0	459.9	443.5	16.45	27.964		
4,000.0	3,987.7	3,829.8	3,783.0	9.0	10.2	-176.13	27.4	314.8	486.2	469.6	16.60	29.296		
4,100.0	4,083.7	3,905.1	3,851.1	9.4	10.8	-175.86	27.4	346.7	552.1	535.1	16.98	32.523		
4,200.0	4,179.7	3,980.3	3,919.2	9.8	11.3	-175.66	27.4	378.7	618.0	600.6	17.36	35.589		
4,300.0	4,275.7	4,055.5	3,987.2	10.2	11.9	-175.49	27.4	410.7	683.9	666.1	17.76	38.504		
4,400.0	4,371.8	4,130.7	4,055.3	10.6	12.5	-175.35	27.4	442.7	749.7	731.6	18.16	41.277		
4,500.0	4,467.8	4,205.9	4,123.4	11.0	13.1	-175.23	27.4	474.6	815.6	797.0	18.57	43.913		
4,600.0	4,563.8	4,281.2	4,191.5	11.5	13.7	-175.13	27.4	506.6	881.5	862.5	18.99	46.418		
4,700.0	4,659.9	4,356.4	4,259.6	12.0	14.3	-175.05	27.4	538.6	947.4	928.0	19.41	48.799		
4,800.0	4,755.9	4,431.6	4,327.7	12.4	14.9	-174.98	27.4	570.6	1,013.3	993.4	19.84	51.066		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 8-6H - 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		
4,900.0	4,851.9	4,506.8	4,395.8	12.9	15.5	-174.91	27.4	602.5	1,079.1	1,058.9	20.28	53.223		
5,000.0	4,948.0	4,582.1	4,463.9	13.4	16.1	-174.85	27.4	634.5	1,145.0	1,124.3	20.72	55.274		
5,100.0	5,044.0	4,657.3	4,531.9	13.9	16.8	-174.80	27.4	666.5	1,210.9	1,189.8	21.16	57.228		
5,200.0	5,140.0	4,732.5	4,600.0	14.5	17.4	-174.76	27.4	698.5	1,276.8	1,255.2	21.61	59.089		
5,300.0	5,236.0	4,807.7	4,668.1	15.0	18.0	-174.71	27.4	730.4	1,342.7	1,320.6	22.06	60.864		
5,400.0	5,332.1	4,882.9	4,736.2	15.5	18.7	-174.68	27.4	762.4	1,408.6	1,386.1	22.52	62.555		
5,500.0	5,428.1	4,958.2	4,804.3	16.0	19.3	-174.64	27.4	794.4	1,474.5	1,451.5	22.98	64.168		
5,600.0	5,524.1	5,033.4	4,872.4	16.6	20.0	-174.61	27.4	826.4	1,540.4	1,516.9	23.44	65.709		
5,700.0	5,620.2	5,108.6	4,940.5	17.1	20.7	-174.58	27.4	858.3	1,606.2	1,582.3	23.91	67.180		
5,732.4	5,651.3	5,133.0	4,962.6	17.3	20.9	-174.57	27.4	868.7	1,627.6	1,603.6	24.06	67.642		
5,750.0	5,668.2	5,146.2	4,974.5	17.4	21.0	179.37	27.4	874.3	1,639.2	1,615.0	24.16	67.835		
5,800.0	5,716.1	5,183.6	5,008.3	17.6	21.3	162.70	27.4	890.2	1,672.2	1,647.6	24.57	68.054		
5,850.0	5,763.8	5,220.6	5,041.8	17.9	21.6	147.80	27.4	905.9	1,705.2	1,680.1	25.14	67.833		
5,900.0	5,810.9	5,257.0	5,074.8	18.1	22.0	135.23	27.4	921.4	1,738.0	1,712.2	25.83	67.276		
5,950.0	5,857.3	5,292.6	5,107.0	18.4	22.3	124.86	27.4	936.6	1,770.6	1,744.0	26.62	66.510		
6,000.0	5,902.8	5,327.2	5,138.4	18.6	22.6	116.33	27.4	951.3	1,802.8	1,775.4	27.46	65.651		
6,050.0	5,947.0	5,360.8	5,168.7	18.9	22.9	109.25	27.4	965.5	1,834.6	1,806.3	28.31	64.795		
6,100.0	5,989.8	5,393.1	5,197.9	19.1	23.2	103.28	27.4	979.3	1,866.0	1,836.8	29.15	64.011		
6,150.0	6,031.0	5,423.9	5,225.9	19.4	23.4	98.19	27.4	992.4	1,896.7	1,866.8	29.94	63.344		
6,200.0	6,070.4	5,453.2	5,252.3	19.6	23.7	93.79	27.4	1,004.8	1,926.9	1,896.2	30.67	62.824		
6,250.0	6,107.8	5,480.7	5,277.2	19.9	23.9	89.93	27.4	1,016.5	1,956.4	1,925.1	31.32	62.467		
6,300.0	6,143.0	5,506.3	5,300.5	20.2	24.2	86.51	27.4	1,027.4	1,985.3	1,953.4	31.88	62.281		
6,350.0	6,175.8	5,530.0	5,321.9	20.5	24.4	83.46	27.4	1,037.5	2,013.5	1,981.1	32.34	62.267		
6,400.0	6,206.1	5,551.6	5,341.4	20.8	24.6	80.71	27.4	1,046.6	2,040.9	2,008.2	32.69	62.425		
6,450.0	6,233.8	5,570.9	5,359.0	21.1	24.7	78.21	27.4	1,054.9	2,067.5	2,034.6	32.95	62.752		
6,472.1	6,245.1	5,578.8	5,366.0	21.3	24.8	77.17	27.4	1,058.2	2,079.1	2,046.0	33.03	62.948		
6,500.0	6,259.0	5,588.4	5,374.7	21.5	24.9	77.46	27.4	1,062.3	2,093.6	2,060.3	33.35	62.773		
6,600.0	6,309.0	5,622.8	5,405.9	22.3	25.2	78.47	27.4	1,076.9	2,147.6	2,113.0	34.58	62.108		
6,622.1	6,320.1	5,630.4	5,412.7	22.5	25.3	78.69	27.4	1,080.1	2,159.9	2,125.0	34.86	61.956		
6,650.0	6,333.6	5,639.7	5,421.2	22.7	25.3	76.83	27.4	1,084.1	2,175.2	2,140.5	34.70	62.691		
6,700.0	6,355.3	5,654.8	5,434.9	23.2	25.5	73.94	27.4	1,090.5	2,201.0	2,166.7	34.28	64.206		
6,750.0	6,373.7	5,667.9	5,446.7	23.6	25.6	71.52	27.4	1,096.1	2,224.5	2,190.8	33.76	65.893		
6,800.0	6,388.7	5,678.8	5,456.6	24.0	25.7	69.53	27.4	1,100.7	2,245.9	2,212.7	33.20	67.655		
6,850.0	6,400.1	5,687.4	5,464.4	24.5	25.8	67.91	27.4	1,104.4	2,264.9	2,232.3	32.65	69.370		
6,900.0	6,407.9	5,693.7	5,470.1	24.9	25.8	66.64	27.4	1,107.1	2,281.6	2,249.4	32.18	70.906		
6,913.9	6,409.5	5,695.1	5,471.3	25.1	25.8	66.34	27.4	1,107.7	2,285.8	2,253.8	32.07	71.281		
7,000.0	6,418.0	5,702.8	5,478.3	25.9	25.9	66.54	27.4	1,110.9	2,312.8	2,279.6	33.15	69.768		
7,100.0	6,428.0	5,711.8	5,486.5	26.9	26.0	66.77	27.4	1,114.8	2,347.6	2,313.1	34.47	68.111		
7,200.0	6,437.9	5,720.8	5,494.6	28.1	26.1	67.01	27.4	1,118.6	2,386.1	2,350.2	35.86	66.531		
7,300.0	6,447.8	5,729.8	5,502.7	29.3	26.1	67.24	27.4	1,122.4	2,428.1	2,390.7	37.33	65.048		
7,400.0	6,457.7	5,738.8	5,510.9	30.6	26.2	67.48	27.4	1,126.2	2,473.3	2,434.5	38.85	63.671		
7,500.0	6,467.7	5,747.8	5,519.0	32.0	26.3	67.71	27.4	1,130.0	2,521.7	2,481.3	40.41	62.403		
7,600.0	6,477.6	5,756.8	5,527.1	33.5	26.4	67.95	27.4	1,133.9	2,573.1	2,531.0	42.02	61.240		
7,700.0	6,487.5	5,765.8	5,535.3	35.0	26.5	68.18	27.4	1,137.7	2,627.2	2,583.5	43.66	60.180		
7,800.0	6,497.5	5,774.7	5,543.4	36.5	26.5	68.42	27.4	1,141.5	2,683.9	2,638.6	45.32	59.214		
7,900.0	6,507.4	5,783.7	5,551.6	38.0	26.6	68.65	27.4	1,145.3	2,743.0	2,696.0	47.02	58.337		
8,000.0	6,517.3	5,792.7	5,559.7	39.6	26.7	68.88	27.4	1,149.2	2,804.5	2,755.8	48.74	57.541		
8,100.0	6,527.3	5,801.7	5,567.8	41.3	26.8	69.12	27.4	1,153.0	2,868.1	2,817.6	50.48	56.819		
8,200.0	6,537.2	5,810.7	5,576.0	42.9	26.9	69.35	27.4	1,156.8	2,933.7	2,881.4	52.23	56.164		
8,300.0	6,547.1	5,819.7	5,584.1	44.6	26.9	69.58	27.4	1,160.6	3,001.2	2,947.1	54.01	55.570		
8,400.0	6,557.1	5,828.3	5,592.4	46.3	26.6	69.82	1,961.8	2,149.1	3,044.9	2,961.1	83.84	36.319		
8,500.0	6,567.0	5,839.2	5,600.7	48.0	27.6	68.92	2,061.2	2,153.6	3,049.4	2,962.1	87.33	34.917		

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

# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design T7N-R80W-S7 - Marr 0780 8-6H - 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		
8,600.0	6,576.9	8,939.1	6,507.2	49.7	58.7	88.92	2,160.5	2,158.1	3,053.9	2,963.0	90.85	33.613		
8,700.0	6,586.9	9,039.0	6,517.2	51.5	59.8	88.93	2,259.8	2,162.6	3,058.4	2,964.0	94.40	32.399		
8,800.0	6,596.8	9,138.9	6,527.1	53.2	61.0	88.93	2,359.1	2,167.1	3,062.9	2,964.9	97.97	31.265		
8,900.0	6,606.7	9,238.8	6,537.0	55.0	62.2	88.93	2,458.4	2,171.6	3,067.4	2,965.9	101.55	30.206		
9,000.0	6,616.7	9,338.7	6,546.9	56.8	63.5	88.93	2,557.7	2,176.1	3,071.9	2,966.8	105.15	29.214		
9,100.0	6,626.6	9,438.6	6,556.8	58.5	64.8	88.93	2,657.0	2,180.6	3,076.4	2,967.6	108.77	28.284		
9,200.0	6,636.5	9,538.5	6,566.8	60.3	66.1	88.93	2,756.3	2,185.1	3,080.9	2,968.5	112.40	27.411		
9,300.0	6,646.5	9,638.4	6,576.7	62.1	67.5	88.94	2,855.6	2,189.6	3,085.4	2,969.4	116.04	26.589		
9,400.0	6,656.4	9,738.3	6,586.6	63.9	68.9	88.94	2,954.9	2,194.1	3,089.9	2,970.2	119.70	25.815		
9,500.0	6,666.3	9,838.2	6,596.5	65.7	70.3	88.94	3,054.2	2,198.6	3,094.4	2,971.1	123.36	25.084		
9,600.0	6,676.3	9,938.1	6,606.5	67.6	71.8	88.94	3,153.5	2,203.1	3,098.9	2,971.9	127.03	24.395		
9,700.0	6,686.2	10,038.0	6,616.4	69.4	73.3	88.94	3,252.8	2,207.6	3,103.4	2,972.7	130.72	23.742		
9,800.0	6,696.1	10,137.9	6,626.3	71.2	74.8	88.94	3,352.1	2,212.1	3,107.9	2,973.5	134.41	23.123		
9,900.0	6,706.0	10,237.8	6,636.2	73.1	76.3	88.95	3,451.4	2,216.6	3,112.4	2,974.3	138.10	22.537		
10,000.0	6,716.0	10,337.7	6,646.1	74.9	77.9	88.95	3,550.7	2,221.1	3,116.9	2,975.1	141.81	21.980		
10,100.0	6,725.9	10,437.5	6,656.1	76.7	79.5	88.95	3,650.0	2,225.6	3,121.4	2,975.9	145.52	21.451		
10,200.0	6,735.8	10,537.4	6,666.0	78.6	81.1	88.95	3,749.3	2,230.1	3,125.9	2,976.7	149.23	20.947		
10,300.0	6,745.8	10,637.3	6,675.9	80.4	82.7	88.95	3,848.6	2,234.6	3,130.4	2,977.5	152.95	20.467		
10,400.0	6,755.7	10,737.2	6,685.8	82.3	84.3	88.95	3,947.9	2,239.1	3,134.9	2,978.3	156.68	20.009		
10,500.0	6,765.6	10,837.1	6,695.8	84.1	85.9	88.96	4,047.2	2,243.6	3,139.4	2,979.0	160.41	19.571		
10,600.0	6,775.6	10,937.0	6,705.7	86.0	87.6	88.96	4,146.5	2,248.1	3,143.9	2,979.8	164.14	19.154		
10,700.0	6,785.5	11,036.9	6,715.6	87.9	89.3	88.96	4,245.8	2,252.6	3,148.5	2,980.6	167.88	18.754		
10,800.0	6,795.4	11,136.8	6,725.5	89.7	90.9	88.96	4,345.1	2,257.1	3,153.0	2,981.3	171.62	18.371		
10,900.0	6,805.4	11,236.7	6,735.4	91.6	92.6	88.96	4,444.4	2,261.6	3,157.5	2,982.1	175.37	18.005		
11,000.0	6,815.3	11,336.6	6,745.4	93.5	94.3	88.96	4,543.7	2,266.1	3,162.0	2,982.8	179.12	17.653		
11,100.0	6,825.2	11,436.5	6,755.3	95.3	96.0	88.97	4,643.0	2,270.6	3,166.5	2,983.6	182.87	17.315		
11,200.0	6,835.2	11,536.4	6,765.2	97.2	97.8	88.97	4,742.3	2,275.1	3,171.0	2,984.3	186.62	16.991		
11,300.0	6,845.1	11,636.3	6,775.1	99.1	99.5	88.97	4,841.6	2,279.6	3,175.5	2,985.1	190.38	16.679		
11,400.0	6,855.0	11,736.2	6,785.1	101.0	101.2	88.97	4,940.9	2,284.1	3,180.0	2,985.8	194.14	16.380		
11,500.0	6,865.0	11,836.1	6,795.0	102.8	103.0	88.97	5,040.2	2,288.6	3,184.5	2,986.6	197.90	16.091		
11,600.0	6,874.9	11,936.0	6,804.9	104.7	104.7	88.97	5,139.5	2,293.1	3,189.0	2,987.3	201.67	15.813		
11,700.0	6,884.8	12,035.9	6,814.8	106.6	106.5	88.98	5,238.8	2,297.6	3,193.5	2,988.0	205.44	15.545		
11,800.0	6,894.8	12,135.8	6,824.7	108.5	108.2	88.98	5,338.1	2,302.1	3,198.0	2,988.8	209.20	15.286		
11,900.0	6,904.7	12,235.7	6,834.7	110.4	110.0	88.98	5,437.4	2,306.6	3,202.5	2,989.5	212.97	15.037		
12,000.0	6,914.6	12,335.6	6,844.6	112.3	111.8	88.98	5,536.7	2,311.1	3,207.0	2,990.2	216.75	14.796		
12,100.0	6,924.6	12,435.5	6,854.5	114.1	113.5	88.98	5,636.1	2,315.6	3,211.5	2,991.0	220.52	14.563		
12,200.0	6,934.5	12,535.4	6,864.4	116.0	115.3	88.98	5,735.4	2,320.1	3,216.0	2,991.7	224.30	14.338		
12,300.0	6,944.4	12,635.3	6,874.4	117.9	117.1	88.99	5,834.7	2,324.5	3,220.5	2,992.4	228.07	14.120		
12,336.4	6,948.0	12,671.7	6,878.0	118.5	117.7	88.99	5,870.8	2,326.2	3,222.1	2,992.8	229.31	14.051		
12,336.7	6,948.1	12,672.0	6,878.0	118.5	117.8	88.99	5,871.1	2,326.2	3,222.1	2,992.8	229.32	14.051		

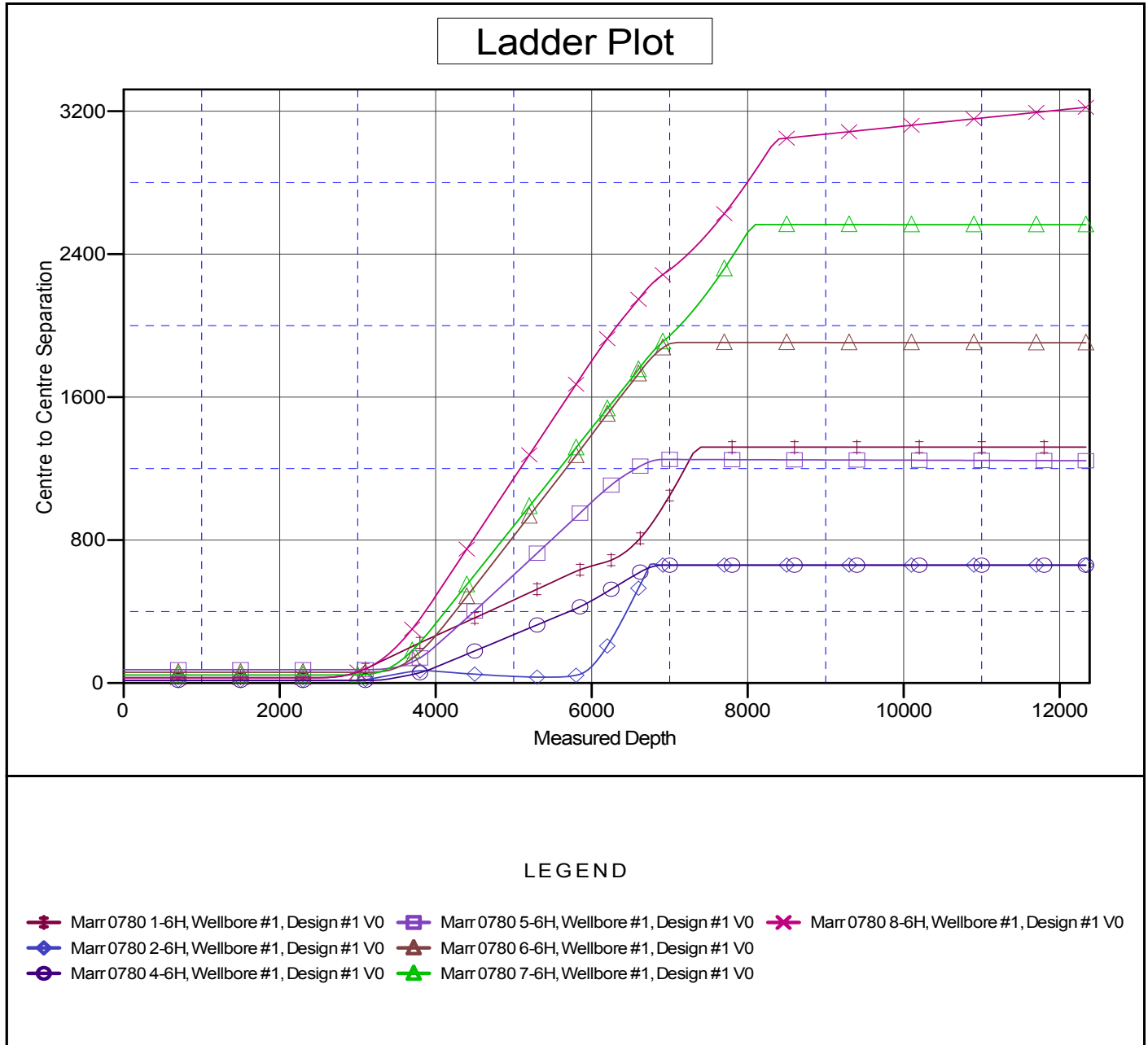
# SandRidge Energy

## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KB @ 8145.0usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Marr 0780 3-6H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: -0.59°





# SandRidge Energy

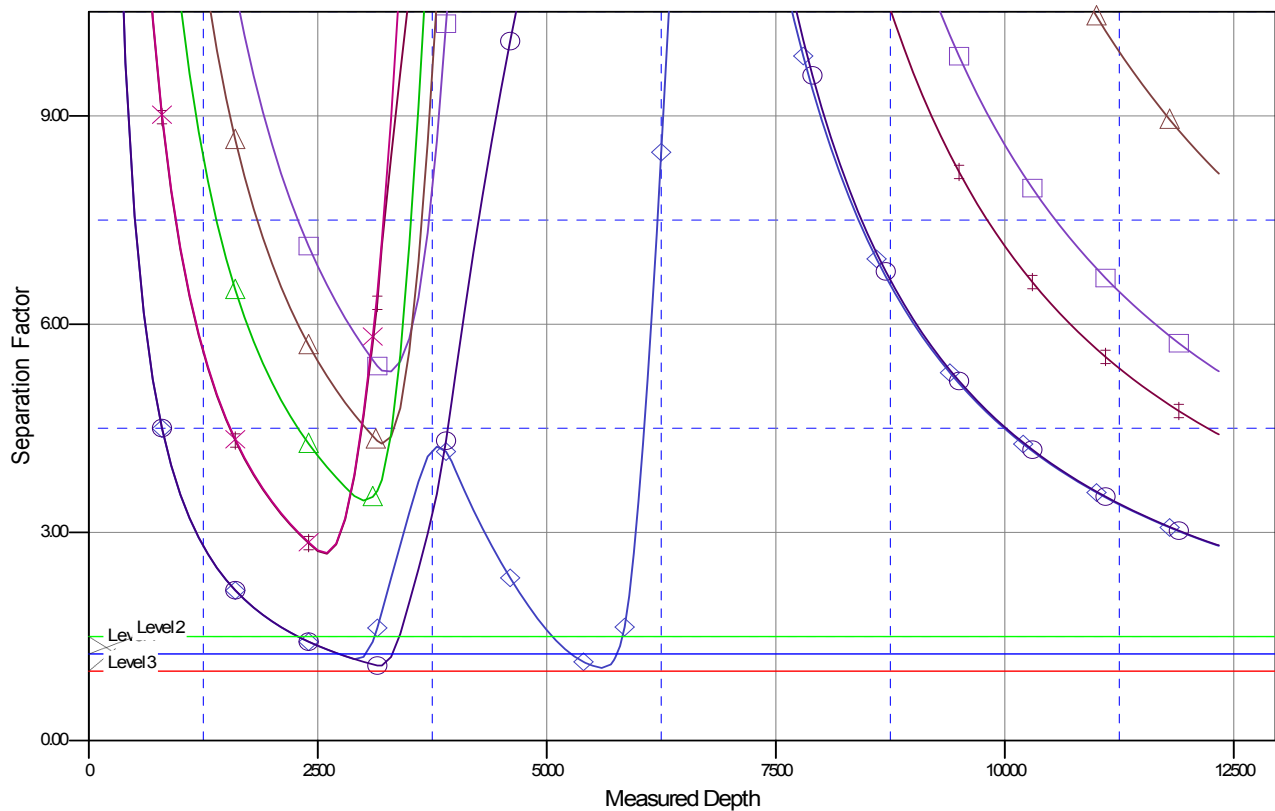
## Anticollision Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Marr 0780 3-6H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8145.0usft
<b>Reference Site:</b>	T7N-R80W-S7	<b>MD Reference:</b>	KB @ 8145.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Marr 0780 3-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMProd
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KB @ 8145.0usft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Marr 0780 3-6H  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: -0.59°

### Separation Factor Plot



### LEGEND

- ✱ Marr 0780 1-6H, Wellbore #1, Design #1 V0
 ◻ Marr 0780 5-6H, Wellbore #1, Design #1 V0
 ✱ Marr 0780 8-6H, Wellbore #1, Design #1 V0
- ◻ Marr 0780 2-6H, Wellbore #1, Design #1 V0
 △ Marr 0780 6-6H, Wellbore #1, Design #1 V0
- ◻ Marr 0780 4-6H, Wellbore #1, Design #1 V0
 △ Marr 0780 7-6H, Wellbore #1, Design #1 V0