SandRidge Energy

North Park Basin
T7N-R80W-S9
Janet 0780 1-16H21

Wellbore #1
Design #1

Anticollision Report

19 December, 2017

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Design #1

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

Survey Tool Program **Date** 12/18/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	17,487.6	Design #1 (Wellbore #1)	Sperry MWD	Fixed:v2:standard declination

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
T7N-R80W-S9						
Castle 0780 8-17H20 - Wellbore #1 - Design #1	3,500.0	3,483.0	530.0	514.6	34.364	CC
Castle 0780 8-17H20 - Wellbore #1 - Design #1	17,488.6	18,294.6	665.9	262.6	1.651	Level 4, ES, SF
Janet 0780 2-16H21 - Wellbore #1 - Design #1	5,500.0	5,500.0	15.0	-9.4	0.614	Level 1, CC, ES, SF
Janet 0780 3-16H21 - Wellbore #1 - Design #1	3,500.0	3,500.0	30.0	14.5	1.941	Level 4, CC
Janet 0780 3-16H21 - Wellbore #1 - Design #1	3,600.0	3,599.8	30.4	14.5	1.911	Level 4, ES
Janet 0780 3-16H21 - Wellbore #1 - Design #1	17,488.6	17,919.2	675.8	284.1	1.725	Level 4, SF

Offset Design T7N-R80W-S9 - Castle 0780 8-17H20 - Wellbore #1 - Design #1

Offset Site Error: 0.0 usft

Survey Program: 0-Sperry MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-2.39	529.6	-22.1	530.3				
100.0	100.0	83.0	83.0	0.1	0.1	-2.39	529.6	-22.1	530.0	529.9	0.16	3,259.016	
200.0	200.0	183.0	183.0	0.3	0.3	-2.39	529.6	-22.1	530.0	529.5	0.59	898.372	
300.0	300.0	283.0	283.0	0.5	0.5	-2.39	529.6	-22.1	530.0	529.0	1.04	509.887	
400.0	400.0	383.0	383.0	0.8	0.7	-2.39	529.6	-22.1	530.0	528.6	1.49	355.959	
500.0	500.0	483.0	483.0	1.0	1.0	-2.39	529.6	-22.1	530.0	528.1	1.94	273.418	
600.0	600.0	583.0	583.0	1.2	1.2	-2.39	529.6	-22.1	530.0	527.7	2.39	221.951	
700.0	700.0	683.0	683.0	1.4	1.4	-2.39	529.6	-22.1	530.0	527.2	2.84	186.790	
800.0	800.0	783.0	783.0	1.7	1.6	-2.39	529.6	-22.1	530.0	526.8	3.29	161.246	
900.0	900.0	883.0	883.0	1.9	1.9	-2.39	529.6	-22.1	530.0	526.3	3.74	141.848	
1,000.0	1,000.0	983.0	983.0	2.1	2.1	-2.39	529.6	-22.1	530.0	525.9	4.19	126.616	
1,100.0	1,100.0	1,083.0	1,083.0	2.3	2.3	-2.39	529.6	-22.1	530.0	525.4	4.64	114.338	
1,200.0	1,200.0	1,183.0	1,183.0	2.6	2.5	-2.39	529.6	-22.1	530.0	525.0	5.09	104.231	
1,300.0	1,300.0	1,283.0	1,283.0	2.8	2.8	-2.39	529.6	-22.1	530.0	524.5	5.53	95.766	
1,400.0	1,400.0	1,383.0	1,383.0	3.0	3.0	-2.39	529.6	-22.1	530.0	524.1	5.98	88.572	
1,500.0	1,500.0	1,483.0	1,483.0	3.2	3.2	-2.39	529.6	-22.1	530.0	523.6	6.43	82.383	
1,600.0	1,600.0	1,583.0	1,583.0	3.5	3.4	-2.39	529.6	-22.1	530.0	523.2	6.88	77.003	
1,700.0	1,700.0	1,683.0	1,683.0	3.7	3.7	-2.39	529.6	-22.1	530.0	522.7	7.33	72.283	
1,800.0	1,800.0	1,783.0	1,783.0	3.9	3.9	-2.39	529.6	-22.1	530.0	522.3	7.78	68.108	
1,900.0	1,900.0	1,883.0	1,883.0	4.1	4.1	-2.39	529.6	-22.1	530.0	521.8	8.23	64.388	
2,000.0	2,000.0	1,983.0	1,983.0	4.4	4.3	-2.39	529.6	-22.1	530.0	521.4	8.68	61.054	

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

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Anticollision Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Castle 0780 8-17H20 - Wellbore #1 - Design #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Sperry MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,100.0	2,100.0	2,083.0	2,083.0	4.6	4.6	-2.39	529.6	-22.1	530.0	520.9	9.13	58.049	
2,200.0	2,200.0	2,183.0	2,183.0	4.8	4.8	-2.39	529.6	-22.1	530.0	520.5	9.58	55.325	
2,300.0	2,300.0	2,283.0	2,283.0	5.0	5.0	-2.39	529.6	-22.1	530.0	520.0	10.03	52.845	
2,400.0	2,400.0	2,383.0	2,383.0	5.3	5.2	-2.39	529.6	-22.1	530.0	519.6	10.48	50.579	
2,500.0	2,500.0	2,483.0	2,483.0	5.5	5.5	-2.39	529.6	-22.1	530.0	519.1	10.93	48.498	
2,600.0	2,600.0	2,583.0	2,583.0	5.7	5.7	-2.39	529.6	-22.1	530.0	518.7	11.38	46.582	
2,700.0	2,700.0	2,683.0	2,683.0	5.9	5.9	-2.39	529.6	-22.1	530.0	518.2	11.83	44.812	
2,800.0	2,800.0	2,783.0	2,783.0	6.2	6.1	-2.39	529.6	-22.1	530.0	517.8	12.28	43.171	
2,900.0	2,900.0	2,883.0	2,883.0	6.4	6.3	-2.39	529.6	-22.1	530.0	517.3	12.73	41.646	
3,000.0	3,000.0	2,983.0	2,983.0	6.6	6.6	-2.39	529.6	-22.1	530.0	516.9	13.18	40.226	
3,100.0	3,100.0	3,083.0	3,083.0	6.8	6.8	-2.39	529.6	-22.1	530.0	516.4	13.63	38.899	
3,200.0	3,200.0	3,183.0	3,183.0	7.1	7.0	-2.39	529.6	-22.1	530.0	516.0	14.08	37.656	
3,300.0	3,300.0	3,283.0	3,283.0	7.3	7.2	-2.39	529.6	-22.1	530.0	515.5	14.53	36.491	
3,400.0	3,400.0	3,383.0	3,383.0	7.5	7.5	-2.39	529.6	-22.1	530.0	515.1	14.98	35.396	
3,500.0	3,500.0	3,483.0	3,483.0	7.7	7.7	-2.39	529.6	-22.1	530.0	514.6	15.42	34.364	CC
3,600.0	3,600.0	3,576.8	3,576.8	8.0	7.9	-2.49	530.0	-23.0	530.5	514.7	15.85	33.465	
3,700.0	3,700.0	3,669.2	3,669.1	8.2	8.1	-2.87	531.6	-26.6	532.4	516.1	16.27	32.720	
3,800.0	3,800.0	3,761.2	3,760.8	8.4	8.3	-3.53	534.3	-33.0	535.8	519.1	16.69	32.104	
3,900.0	3,900.0	3,852.7	3,851.8	8.6	8.5	-4.46	538.2	-42.0	540.7	523.6	17.11	31.609	
4,000.0	4,000.0	3,943.5	3,941.7	8.9	8.7	-5.63	543.2	-53.5	547.4	529.9	17.53	31.232	
4,100.0	4,100.0	4,033.3	4,030.3	9.1	8.9	-7.01	549.2	-67.5	555.9	537.9	17.95	30.973	
4,200.0	4,200.0	4,123.2	4,118.3	9.3	9.2	-8.59	556.4	-84.0	566.4	548.0	18.37	30.829	
4,300.0	4,300.0	4,220.9	4,213.8	9.5	9.4	-10.34	564.6	-103.0	578.1	559.3	18.85	30.676	
4,400.0	4,400.0	4,318.7	4,309.3	9.7	9.7	-12.03	572.8	-122.1	590.3	571.0	19.32	30.549	
4,500.0	4,500.0	4,416.4	4,404.8	10.0	10.0	-13.65	581.1	-141.1	603.0	583.2	19.81	30.445	
4,600.0	4,600.0	4,514.1	4,500.3	10.2	10.3	-15.20	589.3	-160.1	616.2	595.9	20.30	30.363	
4,700.0	4,700.0	4,611.8	4,595.8	10.4	10.7	-16.69	597.5	-179.1	629.9	609.1	20.79	30.301	
4,800.0	4,800.0	4,709.6	4,691.3	10.6	11.0	-18.12	605.8	-198.2	643.9	622.6	21.28	30.259	
4,900.0	4,900.0	4,807.3	4,786.8	10.9	11.3	-19.48	614.0	-217.2	658.3	636.6	21.78	30.234	
5,000.0	5,000.0	4,905.0	4,882.3	11.1	11.7	-20.79	622.2	-236.2	673.1	650.9	22.27	30.225	
5,100.0	5,100.0	5,002.7	4,977.8	11.3	12.0	-22.04	630.5	-255.3	688.3	665.5	22.77	30.231	
5,200.0	5,200.0	5,100.5	5,073.3	11.5	12.4	-23.24	638.7	-274.3	703.7	680.4	23.26	30.251	
5,300.0	5,300.0	5,198.2	5,168.8	11.8	12.8	-24.39	646.9	-293.3	719.4	695.7	23.76	30.282	
5,400.0	5,400.0	5,295.9	5,264.3	12.0	13.1	-25.49	655.1	-312.3	735.4	711.2	24.25	30.324	
5,500.0	5,500.0	5,393.6	5,359.8	12.2	13.5	-26.54	663.4	-331.4	751.7	726.9	24.75	30.376	
5,600.0	5,600.0	5,491.4	5,455.3	12.4	13.9	-27.55	671.6	-350.4	768.2	743.0	25.24	30.436	
5,700.0	5,700.0	5,589.1	5,550.8	12.7	14.3	-28.52	679.8	-369.4	784.9	759.2	25.73	30.504	
5,800.0	5,800.0	5,686.8	5,646.3	12.9	14.7	-29.45	688.1	-388.4	801.9	775.6	26.22	30.578	
5,900.0	5,900.0	5,784.5	5,741.8	13.1	15.1	-30.34	696.3	-407.5	819.0	792.3	26.71	30.658	
6,000.0	6,000.0	5,882.3	5,837.3	13.3	15.5	-31.19	704.5	-426.5	836.3	809.1	27.20	30.744	
6,100.0	6,100.0	5,979.6	5,932.5	13.6	15.9	-121.79	712.7	-445.5	854.8	827.1	27.67	30.887	
6,200.0	6,199.8	6,076.2	6,026.8	13.8	16.3	-122.50	720.8	-464.3	875.2	847.1	28.12	31.125	
6,300.0	6,299.5	6,171.8	6,120.3	14.0	16.7	-123.30	728.9	-482.9	897.9	869.3	28.55	31.443	
6,400.0	6,398.7	6,266.5	6,212.8	14.2	17.1	-124.19	736.9	-501.3	922.8	893.8	28.98	31.842	
6,431.2	6,429.6	6,295.8	6,241.4	14.2	17.2	-124.47	739.3	-507.0	931.1	902.0	29.11	31.982	
6,500.0	6,497.6	6,360.2	6,304.4	14.4	17.4	-125.41	744.8	-519.6	949.7	920.3	29.40	32.302	
6,600.0	6,596.5	6,453.9	6,396.0	14.6	17.8	-126.71	752.7	-537.8	977.1	947.3	29.82	32.768	
6,700.0	6,695.3	6,547.6	6,487.5	14.8	18.2	-127.94	760.5	-556.0	1,005.1	974.8	30.24	33.234	
6,800.0	6,794.2	6,641.3	6,579.1	15.1	18.6	-129.11	768.4	-574.3	1,033.4	1,002.8	30.67	33.698	
6,908.7	6,901.7	7,703.2	7,444.0	15.3	20.6	-159.59	323.2	-689.9	1,023.4	993.3	30.17	33.921	
6,950.0	6,942.5	7,724.9	7,454.8	15.4	20.7	175.41	304.5	-689.9	1,006.9	976.3	30.55	32.956	
7,000.0	6,991.6	8,052.0	7,539.9	15.5	22.4	137.60	-6.9	-690.0	985.7	954.3	31.41	31.384	

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

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Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Castle 0780 8-17H20 - Wellbore #1 - Design #1

Offset Site Error: 0.0 usft

Survey Program: 0-Sperry MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,050.0	7,040.0	8,062.1	7,539.9	15.6	22.5	127.16	-17.0	-690.0	964.8	932.7	32.06	30.094	
7,100.0	7,087.4	8,076.4	7,539.9	15.8	22.7	121.12	-31.3	-690.0	946.2	913.4	32.74	28.898	
7,150.0	7,133.4	8,094.8	7,539.9	15.9	22.8	117.17	-49.7	-690.0	930.1	896.6	33.45	27.802	
7,200.0	7,177.7	8,117.2	7,539.9	16.0	23.0	114.21	-72.1	-690.0	916.4	882.2	34.21	26.791	
7,250.0	7,219.8	8,143.4	7,539.9	16.1	23.3	111.72	-98.3	-690.0	905.2	870.2	34.99	25.868	
7,300.0	7,259.6	8,173.2	7,539.9	16.3	23.6	109.47	-128.1	-690.0	896.3	860.5	35.81	25.031	
7,350.0	7,296.6	8,206.4	7,539.9	16.4	24.0	107.33	-161.3	-690.1	889.4	852.7	36.65	24.264	
7,400.0	7,330.7	8,242.7	7,539.9	16.6	24.4	105.28	-197.6	-690.1	884.2	846.7	37.56	23.541	
7,450.0	7,361.5	8,281.9	7,539.9	16.8	24.8	103.32	-236.8	-690.1	880.6	842.1	38.50	22.871	
7,500.0	7,388.8	8,323.7	7,539.9	17.1	25.3	101.49	-278.5	-690.1	878.1	838.6	39.50	22.231	
7,550.0	7,412.4	8,367.6	7,539.9	17.4	25.9	99.83	-322.5	-690.1	876.5	836.0	40.55	21.616	
7,600.0	7,432.2	8,413.5	7,539.9	17.8	26.5	98.39	-368.4	-690.2	875.5	833.8	41.65	21.021	
7,650.0	7,447.9	8,460.9	7,539.9	18.1	27.1	97.22	-415.8	-690.2	874.7	831.9	42.81	20.435	
7,700.0	7,459.5	8,509.5	7,539.9	18.6	27.7	96.37	-464.4	-690.2	874.1	830.1	44.00	19.864	
7,750.0	7,466.9	8,559.0	7,539.9	19.0	28.4	95.85	-513.8	-690.2	873.3	828.1	45.25	19.302	
7,800.0	7,469.9	8,608.9	7,539.9	19.5	29.1	95.70	-563.7	-690.2	872.4	825.9	46.51	18.757	
7,810.6	7,470.0	8,619.5	7,539.9	19.6	29.3	95.72	-574.3	-690.2	872.2	825.4	46.79	18.642	
7,900.0	7,470.0	8,708.8	7,539.9	20.6	30.6	95.73	-663.7	-690.3	870.3	821.1	49.15	17.707	
8,000.0	7,470.0	8,808.8	7,539.9	21.8	32.1	95.74	-763.7	-690.3	868.2	816.2	51.94	16.714	
8,100.0	7,470.0	8,908.8	7,539.9	23.1	33.7	95.76	-863.7	-690.4	866.0	811.1	54.87	15.783	
8,200.0	7,470.0	9,008.8	7,539.9	24.5	35.3	95.77	-963.6	-690.4	863.9	806.0	57.91	14.918	
8,300.0	7,470.0	9,108.7	7,539.9	26.0	36.9	95.79	-1,063.6	-690.5	861.7	800.7	61.04	14.117	
8,400.0	7,470.0	9,208.7	7,539.9	27.5	38.6	95.80	-1,163.6	-690.5	859.6	795.4	64.25	13.378	
8,500.0	7,470.0	9,308.7	7,539.9	29.0	40.3	95.82	-1,263.6	-690.5	857.5	789.9	67.54	12.696	
8,600.0	7,470.0	9,408.7	7,539.9	30.6	42.0	95.83	-1,363.5	-690.6	855.3	784.5	70.88	12.068	
8,700.0	7,470.0	9,508.7	7,539.9	32.2	43.7	95.84	-1,463.5	-690.6	853.2	778.9	74.27	11.489	
8,800.0	7,470.0	9,608.6	7,539.9	33.9	45.4	95.86	-1,563.5	-690.7	851.1	773.4	77.70	10.954	
8,900.0	7,470.0	9,708.6	7,539.9	35.6	47.2	95.87	-1,663.5	-690.7	848.9	767.8	81.17	10.459	
9,000.0	7,470.0	9,808.6	7,539.9	37.3	48.9	95.89	-1,763.4	-690.8	846.8	762.1	84.67	10.001	
9,100.0	7,470.0	9,908.6	7,539.9	39.0	50.7	95.90	-1,863.4	-690.8	844.7	756.5	88.20	9.577	
9,200.0	7,470.0	10,008.5	7,539.9	40.8	52.5	95.92	-1,963.4	-690.9	842.5	750.8	91.76	9.182	
9,300.0	7,470.0	10,108.5	7,539.9	42.6	54.3	95.93	-2,063.4	-690.9	840.4	745.1	95.33	8.815	
9,400.0	7,470.0	10,208.5	7,539.9	44.3	56.1	95.95	-2,163.4	-690.9	838.3	739.3	98.93	8.473	
9,500.0	7,470.0	10,308.5	7,539.9	46.1	57.9	95.96	-2,263.3	-691.0	836.1	733.6	102.55	8.154	
9,600.0	7,470.0	10,408.4	7,539.9	47.9	59.7	95.98	-2,363.3	-691.0	834.0	727.8	106.18	7.855	
9,700.0	7,470.0	10,508.4	7,539.9	49.7	61.6	96.00	-2,463.3	-691.1	831.9	722.0	109.82	7.575	
9,800.0	7,470.0	10,608.4	7,539.9	51.6	63.4	96.01	-2,563.3	-691.1	829.7	716.3	113.48	7.312	
9,900.0	7,470.0	10,708.4	7,539.9	53.4	65.2	96.03	-2,663.2	-691.2	827.6	710.4	117.14	7.065	
10,000.0	7,470.0	10,808.4	7,539.9	55.2	67.1	96.04	-2,763.2	-691.2	825.5	704.6	120.82	6.832	
10,100.0	7,470.0	10,908.3	7,539.9	57.0	68.9	96.06	-2,863.2	-691.2	823.3	698.8	124.51	6.613	
10,200.0	7,470.0	11,008.3	7,539.9	58.9	70.8	96.07	-2,963.2	-691.3	821.2	693.0	128.20	6.405	
10,300.0	7,470.0	11,108.3	7,539.9	60.7	72.7	96.09	-3,063.1	-691.3	819.1	687.2	131.91	6.209	
10,400.0	7,470.0	11,208.3	7,539.9	62.6	74.5	96.11	-3,163.1	-691.4	816.9	681.3	135.62	6.024	
10,500.0	7,470.0	11,308.2	7,539.9	64.4	76.4	96.12	-3,263.1	-691.4	814.8	675.5	139.33	5.848	
10,600.0	7,470.0	11,408.2	7,539.9	66.3	78.2	96.14	-3,363.1	-691.5	812.7	669.6	143.05	5.681	
10,700.0	7,470.0	11,508.2	7,539.9	68.2	80.1	96.15	-3,463.1	-691.5	810.5	663.7	146.78	5.522	
10,800.0	7,470.0	11,608.2	7,539.9	70.0	82.0	96.17	-3,563.0	-691.5	808.4	657.9	150.51	5.371	
10,900.0	7,470.0	11,708.1	7,539.9	71.9	83.9	96.19	-3,663.0	-691.6	806.3	652.0	154.25	5.227	
11,000.0	7,470.0	11,808.1	7,539.9	73.8	85.7	96.20	-3,763.0	-691.6	804.1	646.1	157.99	5.090	
11,100.0	7,470.0	11,908.1	7,539.9	75.6	87.6	96.22	-3,863.0	-691.7	802.0	640.2	161.74	4.959	
11,200.0	7,470.0	12,008.1	7,539.9	77.5	89.5	96.24	-3,962.9	-691.7	799.9	634.4	165.49	4.833	
11,300.0	7,470.0	12,108.1	7,539.9	79.4	91.4	96.25	-4,062.9	-691.8	797.7	628.5	169.24	4.714	

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Castle 0780 8-17H20 - Wellbore #1 - Design #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Sperry MWD — **Offset Well Error:** 0.0 usft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,400.0	7,470.0	12,208.0	7,539.9	81.3	93.3	96.27	-4,162.9	-691.8	795.6	622.6	173.00	4.599	
11,500.0	7,470.0	12,308.0	7,539.9	83.2	95.2	96.29	-4,262.9	-691.9	793.5	616.7	176.75	4.489	
11,600.0	7,470.0	12,408.0	7,539.9	85.1	97.1	96.30	-4,362.8	-691.9	791.3	610.8	180.51	4.384	
11,700.0	7,470.0	12,508.0	7,539.9	86.9	98.9	96.32	-4,462.8	-691.9	789.2	604.9	184.28	4.283	
11,800.0	7,470.0	12,607.9	7,539.9	88.8	100.8	96.34	-4,562.8	-692.0	787.1	599.0	188.04	4.185	
11,900.0	7,470.0	12,707.9	7,539.9	90.7	102.7	96.36	-4,662.8	-692.0	784.9	593.1	191.81	4.092	
12,000.0	7,470.0	12,807.9	7,539.9	92.6	104.6	96.37	-4,762.8	-692.1	782.8	587.2	195.58	4.002	
12,100.0	7,470.0	12,907.9	7,539.9	94.5	106.5	96.39	-4,862.7	-692.1	780.7	581.3	199.35	3.916	
12,200.0	7,470.0	13,007.8	7,539.9	96.4	108.4	96.41	-4,962.7	-692.2	778.5	575.4	203.13	3.833	
12,300.0	7,470.0	13,107.8	7,539.9	98.3	110.3	96.43	-5,062.7	-692.2	776.4	569.5	206.90	3.752	
12,400.0	7,470.0	13,207.8	7,539.9	100.2	112.2	96.44	-5,162.7	-692.2	774.3	563.6	210.68	3.675	
12,500.0	7,470.0	13,307.8	7,539.9	102.1	114.1	96.46	-5,262.6	-692.3	772.1	557.7	214.46	3.600	
12,600.0	7,470.0	13,407.8	7,539.9	104.0	116.0	96.48	-5,362.6	-692.3	770.0	551.8	218.24	3.528	
12,700.0	7,470.0	13,507.7	7,539.9	105.9	117.9	96.50	-5,462.6	-692.4	767.9	545.8	222.02	3.459	
12,800.0	7,470.0	13,607.7	7,539.9	107.8	119.8	96.52	-5,562.6	-692.4	765.7	539.9	225.80	3.391	
12,900.0	7,470.0	13,707.7	7,539.9	109.7	121.7	96.53	-5,662.5	-692.5	763.6	534.0	229.59	3.326	
13,000.0	7,470.0	13,807.7	7,539.9	111.6	123.6	96.55	-5,762.5	-692.5	761.5	528.1	233.37	3.263	
13,100.0	7,470.0	13,907.6	7,539.9	113.5	125.6	96.57	-5,862.5	-692.6	759.3	522.2	237.16	3.202	
13,200.0	7,470.0	14,007.6	7,539.9	115.4	127.5	96.59	-5,962.5	-692.6	757.2	516.3	240.94	3.143	
13,300.0	7,470.0	14,107.6	7,539.9	117.3	129.4	96.61	-6,062.5	-692.6	755.1	510.3	244.73	3.085	
13,400.0	7,470.0	14,207.6	7,539.9	119.2	131.3	96.63	-6,162.4	-692.7	752.9	504.4	248.52	3.030	
13,500.0	7,470.0	14,307.5	7,539.9	121.1	133.2	96.65	-6,262.4	-692.7	750.8	498.5	252.31	2.976	
13,600.0	7,470.0	14,407.5	7,539.9	123.0	135.1	96.66	-6,362.4	-692.8	748.7	492.6	256.09	2.923	
13,700.0	7,470.0	14,507.5	7,539.9	124.9	137.0	96.68	-6,462.4	-692.8	746.5	486.7	259.88	2.873	
13,800.0	7,470.0	14,607.5	7,539.9	126.8	138.9	96.70	-6,562.3	-692.9	744.4	480.7	263.67	2.823	
13,900.0	7,470.0	14,707.5	7,539.9	128.7	140.8	96.72	-6,662.3	-692.9	742.3	474.8	267.47	2.775	
14,000.0	7,470.0	14,807.4	7,539.9	130.6	142.7	96.74	-6,762.3	-692.9	740.1	468.9	271.26	2.729	
14,100.0	7,470.0	14,907.4	7,539.9	132.5	144.7	96.76	-6,862.3	-693.0	738.0	463.0	275.05	2.683	
14,200.0	7,470.0	15,007.4	7,539.9	134.4	146.6	96.78	-6,962.2	-693.0	735.9	457.0	278.84	2.639	
14,300.0	7,470.0	15,107.4	7,539.9	136.3	148.5	96.80	-7,062.2	-693.1	733.8	451.1	282.63	2.596	
14,400.0	7,470.0	15,207.3	7,539.9	138.2	150.4	96.82	-7,162.2	-693.1	731.6	445.2	286.43	2.554	
14,500.0	7,470.0	15,307.3	7,539.9	140.2	152.3	96.84	-7,262.2	-693.2	729.5	439.3	290.22	2.514	
14,600.0	7,470.0	15,407.3	7,539.9	142.1	154.2	96.86	-7,362.2	-693.2	727.4	433.3	294.02	2.474	
14,700.0	7,470.0	15,507.3	7,539.9	144.0	156.1	96.88	-7,462.1	-693.3	725.2	427.4	297.81	2.435	
14,800.0	7,470.0	15,607.2	7,539.9	145.9	158.0	96.90	-7,562.1	-693.3	723.1	421.5	301.60	2.398	
14,900.0	7,470.0	15,707.2	7,539.9	147.8	160.0	96.92	-7,662.1	-693.3	721.0	415.6	305.40	2.361	
15,000.0	7,470.0	15,807.2	7,539.9	149.7	161.9	96.94	-7,762.1	-693.4	718.8	409.6	309.19	2.325	
15,100.0	7,470.0	15,907.2	7,539.9	151.6	163.8	96.96	-7,862.0	-693.4	716.7	403.7	312.99	2.290	
15,200.0	7,470.0	16,007.2	7,539.9	153.5	165.7	96.98	-7,962.0	-693.5	714.6	397.8	316.78	2.256	
15,300.0	7,470.0	16,107.1	7,539.9	155.4	167.6	97.00	-8,062.0	-693.5	712.5	391.9	320.58	2.222	
15,400.0	7,470.0	16,207.1	7,539.9	157.3	169.5	97.03	-8,162.0	-693.6	710.3	385.9	324.37	2.190	
15,500.0	7,470.0	16,307.1	7,539.9	159.3	171.5	97.05	-8,261.9	-693.6	708.2	380.0	328.17	2.158	
15,600.0	7,470.0	16,407.1	7,539.9	161.2	173.4	97.07	-8,361.9	-693.6	706.1	374.1	331.96	2.127	
15,700.0	7,470.0	16,507.0	7,539.9	163.1	175.3	97.09	-8,461.9	-693.7	703.9	368.2	335.76	2.097	
15,800.0	7,470.0	16,607.0	7,539.9	165.0	177.2	97.11	-8,561.9	-693.7	701.8	362.2	339.55	2.067	
15,900.0	7,470.0	16,707.0	7,539.9	166.9	179.1	97.13	-8,661.9	-693.8	699.7	356.3	343.35	2.038	
16,000.0	7,470.0	16,807.0	7,539.9	168.8	181.1	97.16	-8,761.8	-693.8	697.5	350.4	347.14	2.009	
16,100.0	7,470.0	16,906.9	7,539.9	170.7	183.0	97.18	-8,861.8	-693.9	695.4	344.5	350.94	1.982	Level 4
16,200.0	7,470.0	17,006.9	7,539.9	172.6	184.9	97.20	-8,961.8	-693.9	693.3	338.6	354.73	1.954	Level 4
16,300.0	7,470.0	17,106.9	7,539.9	174.6	186.8	97.22	-9,061.8	-694.0	691.2	332.6	358.53	1.928	Level 4
16,400.0	7,470.0	17,206.9	7,539.9	176.5	188.7	97.24	-9,161.7	-694.0	689.0	326.7	362.32	1.902	Level 4
16,500.0	7,470.0	17,306.9	7,539.9	178.4	190.7	97.27	-9,261.7	-694.0	686.9	320.8	366.12	1.876	Level 4

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Castle 0780 8-17H20 - Wellbore #1 - Design #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Sperry MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,600.0	7,470.0	17,406.8	7,539.9	180.3	192.6	97.29	-9,361.7	-694.1	684.8	314.9	369.91	1.851	Level 4
16,700.0	7,470.0	17,506.8	7,539.9	182.2	194.5	97.31	-9,461.7	-694.1	682.6	308.9	373.71	1.827	Level 4
16,800.0	7,470.0	17,606.8	7,539.9	184.1	196.4	97.34	-9,561.6	-694.2	680.5	303.0	377.50	1.803	Level 4
16,900.0	7,470.0	17,706.8	7,539.9	186.0	198.3	97.36	-9,661.6	-694.2	678.4	297.1	381.30	1.779	Level 4
17,000.0	7,470.0	17,806.7	7,539.9	188.0	200.3	97.38	-9,761.6	-694.3	676.3	291.2	385.09	1.756	Level 4
17,100.0	7,470.0	17,906.7	7,539.9	189.9	202.2	97.41	-9,861.6	-694.3	674.1	285.2	388.88	1.733	Level 4
17,200.0	7,470.0	18,006.7	7,539.9	191.8	204.1	97.43	-9,961.6	-694.3	672.0	279.3	392.68	1.711	Level 4
17,300.0	7,470.0	18,106.7	7,539.9	193.7	206.0	97.45	-10,061.5	-694.4	669.9	273.4	396.47	1.690	Level 4
17,400.0	7,470.0	18,206.6	7,539.9	195.6	207.9	97.48	-10,161.5	-694.4	667.7	267.5	400.26	1.668	Level 4
17,488.0	7,470.0	18,294.6	7,539.9	197.0	209.6	97.50	-10,249.5	-694.5	665.9	262.6	403.28	1.651	Level 4
17,488.6	7,470.0	18,294.6	7,539.9	197.0	209.6	97.50	-10,249.5	-694.5	665.9	262.6	403.30	1.651	Level 4, ES, SF

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Janet 0780 2-16H21 - Wellbore #1 - Design #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Sperry MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-4.67	14.9	-1.2	15.0				
100.0	100.0	100.0	100.0	0.1	0.1	-4.67	14.9	-1.2	15.0	14.8	0.17	88.979	
200.0	200.0	200.0	200.0	0.3	0.3	-4.67	14.9	-1.2	15.0	14.4	0.62	24.267	
300.0	300.0	300.0	300.0	0.5	0.5	-4.67	14.9	-1.2	15.0	13.9	1.07	14.049	
400.0	400.0	400.0	400.0	0.8	0.8	-4.67	14.9	-1.2	15.0	13.5	1.52	9.887	
500.0	500.0	500.0	500.0	1.0	1.0	-4.67	14.9	-1.2	15.0	13.0	1.97	7.627	
600.0	600.0	600.0	600.0	1.2	1.2	-4.67	14.9	-1.2	15.0	12.6	2.42	6.208	
700.0	700.0	700.0	700.0	1.4	1.4	-4.67	14.9	-1.2	15.0	12.1	2.87	5.234	
800.0	800.0	800.0	800.0	1.7	1.7	-4.67	14.9	-1.2	15.0	11.7	3.32	4.524	
900.0	900.0	900.0	900.0	1.9	1.9	-4.67	14.9	-1.2	15.0	11.2	3.76	3.984	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-4.67	14.9	-1.2	15.0	10.8	4.21	3.559	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	-4.67	14.9	-1.2	15.0	10.3	4.66	3.216	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-4.67	14.9	-1.2	15.0	9.9	5.11	2.933	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-4.67	14.9	-1.2	15.0	9.4	5.56	2.696	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-4.67	14.9	-1.2	15.0	9.0	6.01	2.495	
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.2	-4.67	14.9	-1.2	15.0	8.5	6.46	2.321	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-4.67	14.9	-1.2	15.0	8.1	6.91	2.170	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-4.67	14.9	-1.2	15.0	7.6	7.36	2.038	
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-4.67	14.9	-1.2	15.0	7.2	7.81	1.920	Level 4
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.1	-4.67	14.9	-1.2	15.0	6.7	8.26	1.816	Level 4
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-4.67	14.9	-1.2	15.0	6.3	8.71	1.722	Level 4
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-4.67	14.9	-1.2	15.0	5.8	9.16	1.638	Level 4
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-4.67	14.9	-1.2	15.0	5.4	9.61	1.561	Level 4
2,300.0	2,300.0	2,300.0	2,300.0	5.0	5.0	-4.67	14.9	-1.2	15.0	4.9	10.06	1.491	Level 3
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-4.67	14.9	-1.2	15.0	4.5	10.51	1.427	Level 3
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-4.67	14.9	-1.2	15.0	4.0	10.96	1.369	Level 3
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-4.67	14.9	-1.2	15.0	3.6	11.41	1.315	Level 3
2,700.0	2,700.0	2,700.0	2,700.0	5.9	5.9	-4.67	14.9	-1.2	15.0	3.1	11.86	1.265	Level 3
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-4.67	14.9	-1.2	15.0	2.7	12.31	1.219	Level 2
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-4.67	14.9	-1.2	15.0	2.2	12.76	1.176	Level 2
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	-4.67	14.9	-1.2	15.0	1.8	13.21	1.136	Level 2
3,100.0	3,100.0	3,100.0	3,100.0	6.8	6.8	-4.67	14.9	-1.2	15.0	1.3	13.65	1.099	Level 2
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	-4.67	14.9	-1.2	15.0	0.9	14.10	1.064	Level 2
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	-4.67	14.9	-1.2	15.0	0.4	14.55	1.031	Level 2
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	-4.67	14.9	-1.2	15.0	0.0	15.00	1.000	Level 1
3,500.0	3,500.0	3,500.0	3,500.0	7.7	7.7	-4.67	14.9	-1.2	15.0	-0.5	15.45	0.971	Level 1
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	-4.67	14.9	-1.2	15.0	-0.9	15.90	0.943	Level 1
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	-4.67	14.9	-1.2	15.0	-1.4	16.35	0.917	Level 1
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	-4.67	14.9	-1.2	15.0	-1.8	16.80	0.893	Level 1
3,900.0	3,900.0	3,900.0	3,900.0	8.6	8.6	-4.67	14.9	-1.2	15.0	-2.3	17.25	0.870	Level 1
4,000.0	4,000.0	4,000.0	4,000.0	8.9	8.9	-4.67	14.9	-1.2	15.0	-2.7	17.70	0.847	Level 1
4,100.0	4,100.0	4,100.0	4,100.0	9.1	9.1	-4.67	14.9	-1.2	15.0	-3.2	18.15	0.826	Level 1
4,200.0	4,200.0	4,200.0	4,200.0	9.3	9.3	-4.67	14.9	-1.2	15.0	-3.6	18.60	0.806	Level 1
4,300.0	4,300.0	4,300.0	4,300.0	9.5	9.5	-4.67	14.9	-1.2	15.0	-4.0	19.05	0.787	Level 1
4,400.0	4,400.0	4,400.0	4,400.0	9.7	9.7	-4.67	14.9	-1.2	15.0	-4.5	19.50	0.769	Level 1
4,500.0	4,500.0	4,500.0	4,500.0	10.0	10.0	-4.67	14.9	-1.2	15.0	-4.9	19.95	0.752	Level 1
4,600.0	4,600.0	4,600.0	4,600.0	10.2	10.2	-4.67	14.9	-1.2	15.0	-5.4	20.40	0.735	Level 1
4,700.0	4,700.0	4,700.0	4,700.0	10.4	10.4	-4.67	14.9	-1.2	15.0	-5.8	20.85	0.720	Level 1
4,800.0	4,800.0	4,800.0	4,800.0	10.6	10.6	-4.67	14.9	-1.2	15.0	-6.3	21.30	0.704	Level 1
4,900.0	4,900.0	4,900.0	4,900.0	10.9	10.9	-4.67	14.9	-1.2	15.0	-6.7	21.75	0.690	Level 1
5,000.0	5,000.0	5,000.0	5,000.0	11.1	11.1	-4.67	14.9	-1.2	15.0	-7.2	22.20	0.676	Level 1
5,100.0	5,100.0	5,100.0	5,100.0	11.3	11.3	-4.67	14.9	-1.2	15.0	-7.6	22.65	0.662	Level 1

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Janet 0780 2-16H21 - Wellbore #1 - Design #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Sperry MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,200.0	5,200.0	5,200.0	11.5	11.5	-4.67	14.9	-1.2	15.0	-8.1	23.09	0.649	Level 1
5,300.0	5,300.0	5,300.0	5,300.0	11.8	11.8	-4.67	14.9	-1.2	15.0	-8.5	23.54	0.637	Level 1
5,400.0	5,400.0	5,400.0	5,400.0	12.0	12.0	-4.67	14.9	-1.2	15.0	-9.0	23.99	0.625	Level 1
5,466.7	5,466.7	5,466.7	5,466.7	12.1	12.1	-4.67	14.9	-1.2	15.0	-9.3	24.29	0.617	Level 1
5,500.0	5,500.0	5,500.0	5,500.0	12.2	12.2	-4.67	14.9	-1.2	15.0	-9.4	24.44	0.614	Level 1, CC, ES, SF
5,600.0	5,600.0	5,599.5	5,599.5	12.4	12.4	-1.55	16.5	-0.4	16.5	-8.4	24.88	0.663	Level 1
5,700.0	5,700.0	5,698.8	5,698.6	12.7	12.7	5.04	21.1	1.9	21.2	-4.1	25.31	0.839	Level 1
5,800.0	5,800.0	5,797.6	5,797.1	12.9	12.9	11.18	28.8	5.7	29.5	3.8	25.71	1.146	Level 2
5,900.0	5,900.0	5,895.7	5,894.4	13.1	13.1	15.59	39.4	11.0	41.2	15.1	26.09	1.581	Level 4
6,000.0	6,000.0	5,992.9	5,990.4	13.3	13.3	18.53	52.8	17.7	56.5	30.0	26.45	2.135	
6,100.0	6,100.0	6,089.0	6,084.9	13.6	13.5	-70.41	68.9	25.8	74.5	47.8	26.78	2.783	
6,200.0	6,199.8	6,184.5	6,178.0	13.8	13.8	-71.33	87.7	35.2	94.7	67.6	27.10	3.494	
6,300.0	6,299.5	6,282.3	6,273.1	14.0	14.0	-73.39	108.1	45.4	115.2	87.6	27.53	4.182	
6,400.0	6,398.7	6,380.1	6,368.2	14.2	14.3	-76.16	128.5	55.5	134.9	106.9	27.98	4.822	
6,431.2	6,429.6	6,410.6	6,397.9	14.2	14.4	-77.14	134.8	58.7	141.0	112.9	28.13	5.013	
6,500.0	6,497.6	6,477.8	6,463.2	14.4	14.6	-79.38	148.8	65.7	154.5	126.0	28.45	5.430	
6,600.0	6,596.5	6,575.5	6,558.3	14.6	14.9	-82.02	169.2	75.9	174.4	145.5	28.93	6.030	
6,700.0	6,695.3	6,673.2	6,653.3	14.8	15.1	-84.11	189.6	86.1	194.6	165.2	29.41	6.618	
6,800.0	6,794.2	6,770.9	6,748.3	15.1	15.4	-85.81	209.9	96.3	215.1	185.2	29.90	7.192	
6,908.7	6,901.7	6,877.2	6,851.6	15.3	15.8	-87.33	232.1	107.3	237.4	207.0	30.45	7.798	
6,950.0	6,942.5	6,917.1	6,890.5	15.4	15.9	-113.43	240.4	111.5	247.4	216.8	30.65	8.072	
7,000.0	6,991.6	6,964.5	6,936.5	15.5	16.1	-135.31	250.3	116.4	263.4	232.5	30.89	8.525	
7,050.0	7,040.0	7,010.2	6,981.0	15.6	16.2	-147.92	259.8	121.2	283.4	252.2	31.13	9.104	
7,100.0	7,087.4	7,076.1	7,045.4	15.8	16.4	-155.72	272.1	128.1	306.6	275.1	31.56	9.715	
7,150.0	7,133.4	7,178.0	7,146.5	15.9	16.6	-161.12	277.1	138.5	327.4	295.4	31.94	10.251	
7,200.0	7,177.7	7,292.3	7,258.9	16.0	16.8	-165.03	261.2	149.7	343.4	311.7	31.72	10.827	
7,250.0	7,219.8	7,417.3	7,375.7	16.1	16.8	-168.03	218.6	160.8	353.6	322.8	30.79	11.486	
7,300.0	7,259.6	7,548.7	7,485.4	16.3	16.9	-170.45	147.7	170.5	357.1	327.8	29.22	12.218	
7,350.0	7,296.6	7,679.8	7,576.2	16.4	16.9	-172.50	53.7	177.7	353.4	326.0	27.39	12.899	
7,400.0	7,330.7	7,804.4	7,640.7	16.6	17.0	-174.29	-52.4	182.0	342.9	317.1	25.82	13.280	
7,450.0	7,361.5	7,918.0	7,678.4	16.8	17.5	-175.90	-159.4	183.5	326.7	301.8	24.90	13.118	
7,500.0	7,388.8	8,019.1	7,693.8	17.1	18.1	-177.38	-259.3	182.9	305.8	281.1	24.72	12.371	
7,550.0	7,412.4	8,082.9	7,695.0	17.4	18.5	-178.37	-323.0	181.7	282.7	257.7	24.92	11.341	
7,600.0	7,432.2	8,128.8	7,695.0	17.8	18.9	-179.00	-368.8	180.7	262.9	237.8	25.11	10.469	
7,650.0	7,447.9	8,176.1	7,695.0	18.1	19.3	-179.54	-416.2	179.6	247.1	221.8	25.31	9.764	
7,700.0	7,459.5	8,224.7	7,695.0	18.6	19.8	-179.96	-464.8	178.6	235.5	210.0	25.53	9.226	
7,750.0	7,466.9	8,274.2	7,695.0	19.0	20.3	179.76	-514.2	177.5	228.2	202.4	25.76	8.855	
7,800.0	7,469.9	8,324.1	7,695.0	19.5	20.8	179.64	-564.1	176.4	225.1	199.1	26.02	8.652	
7,810.6	7,470.0	8,334.7	7,695.0	19.6	21.0	179.63	-574.7	176.2	225.0	198.9	26.07	8.630	
7,900.0	7,470.0	8,424.1	7,695.0	20.6	22.0	179.63	-664.0	174.2	225.0	198.4	26.56	8.470	
8,000.0	7,470.0	8,524.1	7,695.0	21.8	23.3	179.64	-764.0	172.0	225.0	197.8	27.18	8.278	
8,100.0	7,470.0	8,624.1	7,695.0	23.1	24.6	179.64	-864.0	169.9	225.0	197.1	27.86	8.076	
8,200.0	7,470.0	8,724.1	7,695.0	24.5	26.0	179.64	-964.0	167.7	225.0	196.4	28.60	7.868	
8,300.0	7,470.0	8,824.1	7,695.0	26.0	27.5	179.64	-1,063.9	165.5	225.0	195.6	29.39	7.655	
8,400.0	7,470.0	8,924.1	7,695.0	27.5	29.0	179.65	-1,163.9	163.3	225.0	194.8	30.23	7.441	
8,500.0	7,470.0	9,024.1	7,695.0	29.0	30.6	179.65	-1,263.9	161.1	225.0	193.9	31.13	7.228	
8,600.0	7,470.0	9,124.1	7,695.0	30.6	32.2	179.65	-1,363.9	159.0	225.0	192.9	32.06	7.018	
8,700.0	7,470.0	9,224.1	7,695.0	32.2	33.9	179.65	-1,463.9	156.8	225.0	192.0	33.03	6.811	
8,800.0	7,470.0	9,324.1	7,695.0	33.9	35.5	179.65	-1,563.8	154.6	225.0	190.9	34.04	6.610	
8,900.0	7,470.0	9,424.1	7,695.0	35.6	37.2	179.66	-1,663.8	152.4	225.0	189.9	35.08	6.414	
9,000.0	7,470.0	9,524.1	7,695.0	37.3	39.0	179.66	-1,763.8	150.2	225.0	188.8	36.15	6.224	
9,100.0	7,470.0	9,624.1	7,695.0	39.0	40.7	179.66	-1,863.8	148.1	225.0	187.7	37.25	6.040	

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

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Janet 0780 2-16H21 - Wellbore #1 - Design #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Sperry MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,200.0	7,470.0	9,724.1	7,695.0	40.8	42.5	179.66	-1,963.7	145.9	225.0	186.6	38.37	5.863	
9,300.0	7,470.0	9,824.1	7,695.0	42.6	44.2	179.67	-2,063.7	143.7	225.0	185.5	39.52	5.694	
9,400.0	7,470.0	9,924.1	7,695.0	44.3	46.0	179.67	-2,163.7	141.5	225.0	184.3	40.68	5.530	
9,500.0	7,470.0	10,024.1	7,695.0	46.1	47.8	179.67	-2,263.7	139.3	225.0	183.1	41.87	5.374	
9,600.0	7,470.0	10,124.1	7,695.0	47.9	49.6	179.67	-2,363.6	137.1	225.0	181.9	43.07	5.224	
9,700.0	7,470.0	10,224.1	7,695.0	49.7	51.4	179.67	-2,463.6	135.0	225.0	180.7	44.29	5.080	
9,800.0	7,470.0	10,324.1	7,695.0	51.6	53.2	179.68	-2,563.6	132.8	225.0	179.5	45.52	4.942	
9,900.0	7,470.0	10,424.1	7,695.0	53.4	55.0	179.68	-2,663.6	130.6	225.0	178.2	46.77	4.811	
10,000.0	7,470.0	10,524.1	7,695.0	55.2	56.9	179.68	-2,763.5	128.4	225.0	177.0	48.03	4.685	
10,100.0	7,470.0	10,624.1	7,695.0	57.0	58.7	179.68	-2,863.5	126.2	225.0	175.7	49.30	4.564	
10,200.0	7,470.0	10,724.1	7,695.0	58.9	60.5	179.69	-2,963.5	124.1	225.0	174.4	50.58	4.448	
10,300.0	7,470.0	10,824.1	7,695.0	60.7	62.4	179.69	-3,063.5	121.9	225.0	173.1	51.87	4.337	
10,400.0	7,470.0	10,924.1	7,695.0	62.6	64.2	179.69	-3,163.4	119.7	225.0	171.8	53.17	4.231	
10,500.0	7,470.0	11,024.1	7,695.0	64.4	66.1	179.69	-3,263.4	117.5	225.0	170.5	54.48	4.130	
10,600.0	7,470.0	11,124.1	7,695.0	66.3	68.0	179.69	-3,363.4	115.3	225.0	169.2	55.80	4.032	
10,700.0	7,470.0	11,224.1	7,695.0	68.2	69.8	179.70	-3,463.4	113.2	225.0	167.9	57.12	3.939	
10,800.0	7,470.0	11,324.1	7,695.0	70.0	71.7	179.70	-3,563.4	111.0	225.0	166.5	58.45	3.849	
10,900.0	7,470.0	11,424.1	7,695.0	71.9	73.5	179.70	-3,663.3	108.8	225.0	165.2	59.79	3.763	
11,000.0	7,470.0	11,524.1	7,695.0	73.8	75.4	179.70	-3,763.3	106.6	225.0	163.9	61.13	3.680	
11,100.0	7,470.0	11,624.1	7,695.0	75.6	77.3	179.71	-3,863.3	104.4	225.0	162.5	62.48	3.601	
11,200.0	7,470.0	11,724.1	7,695.0	77.5	79.2	179.71	-3,963.3	102.3	225.0	161.1	63.84	3.524	
11,300.0	7,470.0	11,824.1	7,695.0	79.4	81.0	179.71	-4,063.2	100.1	225.0	159.8	65.20	3.451	
11,400.0	7,470.0	11,924.1	7,695.0	81.3	82.9	179.71	-4,163.2	97.9	225.0	158.4	66.56	3.380	
11,500.0	7,470.0	12,024.1	7,695.0	83.2	84.8	179.71	-4,263.2	95.7	225.0	157.1	67.93	3.312	
11,600.0	7,470.0	12,124.1	7,695.0	85.1	86.7	179.72	-4,363.2	93.5	225.0	155.7	69.30	3.247	
11,700.0	7,470.0	12,224.1	7,695.0	86.9	88.6	179.72	-4,463.1	91.3	225.0	154.3	70.67	3.183	
11,800.0	7,470.0	12,324.1	7,695.0	88.8	90.5	179.72	-4,563.1	89.2	225.0	152.9	72.05	3.122	
11,900.0	7,470.0	12,424.1	7,695.0	90.7	92.4	179.72	-4,663.1	87.0	225.0	151.5	73.44	3.064	
12,000.0	7,470.0	12,524.1	7,695.0	92.6	94.2	179.73	-4,763.1	84.8	225.0	150.2	74.82	3.007	
12,100.0	7,470.0	12,624.1	7,695.0	94.5	96.1	179.73	-4,863.0	82.6	225.0	148.8	76.21	2.952	
12,200.0	7,470.0	12,724.1	7,695.0	96.4	98.0	179.73	-4,963.0	80.4	225.0	147.4	77.60	2.899	
12,300.0	7,470.0	12,824.1	7,695.0	98.3	99.9	179.73	-5,063.0	78.3	225.0	146.0	79.00	2.848	
12,400.0	7,470.0	12,924.1	7,695.0	100.2	101.8	179.73	-5,163.0	76.1	225.0	144.6	80.40	2.798	
12,500.0	7,470.0	13,024.1	7,695.0	102.1	103.7	179.74	-5,262.9	73.9	225.0	143.2	81.79	2.751	
12,600.0	7,470.0	13,124.1	7,695.0	104.0	105.6	179.74	-5,362.9	71.7	225.0	141.8	83.20	2.704	
12,700.0	7,470.0	13,224.1	7,695.0	105.9	107.5	179.74	-5,462.9	69.5	225.0	140.4	84.60	2.659	
12,800.0	7,470.0	13,324.1	7,695.0	107.8	109.4	179.74	-5,562.9	67.4	225.0	139.0	86.01	2.616	
12,900.0	7,470.0	13,424.1	7,695.0	109.7	111.3	179.75	-5,662.9	65.2	225.0	137.6	87.41	2.574	
13,000.0	7,470.0	13,524.1	7,695.0	111.6	113.2	179.75	-5,762.8	63.0	225.0	136.2	88.82	2.533	
13,100.0	7,470.0	13,624.1	7,695.0	113.5	115.1	179.75	-5,862.8	60.8	225.0	134.7	90.24	2.493	
13,200.0	7,470.0	13,724.1	7,695.0	115.4	117.0	179.75	-5,962.8	58.6	225.0	133.3	91.65	2.455	
13,300.0	7,470.0	13,824.1	7,695.0	117.3	118.9	179.75	-6,062.8	56.5	225.0	131.9	93.07	2.417	
13,400.0	7,470.0	13,924.1	7,695.0	119.2	120.8	179.76	-6,162.7	54.3	225.0	130.5	94.48	2.381	
13,500.0	7,470.0	14,024.1	7,695.0	121.1	122.7	179.76	-6,262.7	52.1	225.0	129.1	95.90	2.346	
13,600.0	7,470.0	14,124.1	7,695.0	123.0	124.6	179.76	-6,362.7	49.9	225.0	127.7	97.32	2.312	
13,700.0	7,470.0	14,224.1	7,695.0	124.9	126.5	179.76	-6,462.7	47.7	225.0	126.2	98.74	2.279	
13,800.0	7,470.0	14,324.1	7,695.0	126.8	128.4	179.77	-6,562.6	45.5	225.0	124.8	100.16	2.246	
13,900.0	7,470.0	14,424.1	7,695.0	128.7	130.3	179.77	-6,662.6	43.4	225.0	123.4	101.59	2.215	
14,000.0	7,470.0	14,524.1	7,695.0	130.6	132.2	179.77	-6,762.6	41.2	225.0	122.0	103.01	2.184	
14,100.0	7,470.0	14,624.1	7,695.0	132.5	134.1	179.77	-6,862.6	39.0	225.0	120.5	104.44	2.154	
14,200.0	7,470.0	14,724.1	7,695.0	134.4	136.0	179.77	-6,962.5	36.8	225.0	119.1	105.87	2.125	
14,300.0	7,470.0	14,824.1	7,695.0	136.3	138.0	179.78	-7,062.5	34.6	225.0	117.7	107.29	2.097	

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Janet 0780 2-16H21 - 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			Offset Wellbore Centre		Distance				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,400.0	7,470.0	14,924.1	7,695.0	138.2	139.9	179.78	-7,162.5	32.5	225.0	116.3	108.72	2.069	
14,500.0	7,470.0	15,024.1	7,695.0	140.2	141.8	179.78	-7,262.5	30.3	225.0	114.8	110.15	2.042	
14,600.0	7,470.0	15,124.1	7,695.0	142.1	143.7	179.78	-7,362.5	28.1	225.0	113.4	111.58	2.016	
14,700.0	7,470.0	15,224.1	7,695.0	144.0	145.6	179.79	-7,462.4	25.9	225.0	112.0	113.02	1.991	Level 4
14,800.0	7,470.0	15,324.1	7,695.0	145.9	147.5	179.79	-7,562.4	23.7	225.0	110.5	114.45	1.966	Level 4
14,900.0	7,470.0	15,424.1	7,695.0	147.8	149.4	179.79	-7,662.4	21.6	225.0	109.1	115.88	1.941	Level 4
15,000.0	7,470.0	15,524.1	7,695.0	149.7	151.3	179.79	-7,762.4	19.4	225.0	107.7	117.32	1.918	Level 4
15,100.0	7,470.0	15,624.1	7,695.0	151.6	153.2	179.79	-7,862.3	17.2	225.0	106.2	118.75	1.895	Level 4
15,200.0	7,470.0	15,724.1	7,695.0	153.5	155.1	179.80	-7,962.3	15.0	225.0	104.8	120.19	1.872	Level 4
15,300.0	7,470.0	15,824.1	7,695.0	155.4	157.0	179.80	-8,062.3	12.8	225.0	103.4	121.63	1.850	Level 4
15,400.0	7,470.0	15,924.1	7,695.0	157.3	159.0	179.80	-8,162.3	10.6	225.0	101.9	123.06	1.828	Level 4
15,500.0	7,470.0	16,024.1	7,695.0	159.3	160.9	179.80	-8,262.2	8.5	225.0	100.5	124.50	1.807	Level 4
15,600.0	7,470.0	16,124.1	7,695.0	161.2	162.8	179.81	-8,362.2	6.3	225.0	99.0	125.94	1.786	Level 4
15,700.0	7,470.0	16,224.1	7,695.0	163.1	164.7	179.81	-8,462.2	4.1	225.0	97.6	127.38	1.766	Level 4
15,800.0	7,470.0	16,324.1	7,695.0	165.0	166.6	179.81	-8,562.2	1.9	225.0	96.2	128.82	1.746	Level 4
15,900.0	7,470.0	16,424.1	7,695.0	166.9	168.5	179.81	-8,662.1	-0.3	225.0	94.7	130.26	1.727	Level 4
16,000.0	7,470.0	16,524.1	7,695.0	168.8	170.4	179.81	-8,762.1	-2.4	225.0	93.3	131.70	1.708	Level 4
16,100.0	7,470.0	16,624.1	7,695.0	170.7	172.3	179.82	-8,862.1	-4.6	225.0	91.8	133.15	1.690	Level 4
16,200.0	7,470.0	16,724.1	7,695.0	172.6	174.3	179.82	-8,962.1	-6.8	225.0	90.4	134.59	1.672	Level 4
16,300.0	7,470.0	16,824.1	7,695.0	174.6	176.2	179.82	-9,062.0	-9.0	225.0	89.0	136.03	1.654	Level 4
16,400.0	7,470.0	16,924.1	7,695.0	176.5	178.1	179.82	-9,162.0	-11.2	225.0	87.5	137.47	1.637	Level 4
16,500.0	7,470.0	17,024.1	7,695.0	178.4	180.0	179.83	-9,262.0	-13.3	225.0	86.1	138.92	1.620	Level 4
16,600.0	7,470.0	17,124.1	7,695.0	180.3	181.9	179.83	-9,362.0	-15.5	225.0	84.6	140.36	1.603	Level 4
16,700.0	7,470.0	17,224.1	7,695.0	182.2	183.8	179.83	-9,462.0	-17.7	225.0	83.2	141.81	1.587	Level 4
16,800.0	7,470.0	17,324.1	7,695.0	184.1	185.7	179.83	-9,561.9	-19.9	225.0	81.7	143.25	1.571	Level 4
16,900.0	7,470.0	17,424.1	7,695.0	186.0	187.7	179.83	-9,661.9	-22.1	225.0	80.3	144.70	1.555	Level 4
17,000.0	7,470.0	17,524.1	7,695.0	188.0	189.6	179.84	-9,761.9	-24.2	225.0	78.8	146.14	1.539	Level 4
17,100.0	7,470.0	17,624.1	7,695.0	189.9	191.5	179.84	-9,861.9	-26.4	225.0	77.4	147.59	1.524	Level 4
17,200.0	7,470.0	17,724.1	7,695.0	191.8	193.4	179.84	-9,961.8	-28.6	225.0	75.9	149.04	1.510	Level 4
17,300.0	7,470.0	17,824.1	7,695.0	193.7	195.3	179.84	-10,061.8	-30.8	225.0	74.5	150.48	1.495	Level 3
17,400.0	7,470.0	17,924.1	7,695.0	195.6	197.2	179.85	-10,161.8	-33.0	225.0	73.1	151.93	1.481	Level 3
17,488.0	7,470.0	18,012.1	7,695.0	197.0	198.9	179.85	-10,249.8	-34.9	225.0	72.1	152.89	1.472	Level 3
17,488.5	7,470.0	18,012.6	7,695.0	197.0	198.9	179.85	-10,250.3	-34.9	225.0	72.1	152.89	1.472	Level 3
17,488.6	7,470.0	18,012.7	7,695.0	197.0	198.9	179.85	-10,250.4	-34.9	225.0	72.1	152.89	1.472	Level 3

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Janet 0780 3-16H21 - Wellbore #1 - Design #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Sperry MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-4.67	29.9	-2.4	30.0				
100.0	100.0	100.0	100.0	0.1	0.1	-4.67	29.9	-2.4	30.0	29.8	0.17	177.959	
200.0	200.0	200.0	200.0	0.3	0.3	-4.67	29.9	-2.4	30.0	29.4	0.62	48.534	
300.0	300.0	300.0	300.0	0.5	0.5	-4.67	29.9	-2.4	30.0	28.9	1.07	28.099	
400.0	400.0	400.0	400.0	0.8	0.8	-4.67	29.9	-2.4	30.0	28.5	1.52	19.773	
500.0	500.0	500.0	500.0	1.0	1.0	-4.67	29.9	-2.4	30.0	28.0	1.97	15.254	
600.0	600.0	600.0	600.0	1.2	1.2	-4.67	29.9	-2.4	30.0	27.6	2.42	12.416	
700.0	700.0	700.0	700.0	1.4	1.4	-4.67	29.9	-2.4	30.0	27.1	2.87	10.468	
800.0	800.0	800.0	800.0	1.7	1.7	-4.67	29.9	-2.4	30.0	26.7	3.32	9.049	
900.0	900.0	900.0	900.0	1.9	1.9	-4.67	29.9	-2.4	30.0	26.2	3.76	7.968	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-4.67	29.9	-2.4	30.0	25.8	4.21	7.118	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	-4.67	29.9	-2.4	30.0	25.3	4.66	6.432	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-4.67	29.9	-2.4	30.0	24.9	5.11	5.867	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-4.67	29.9	-2.4	30.0	24.4	5.56	5.393	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-4.67	29.9	-2.4	30.0	24.0	6.01	4.990	
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.2	-4.67	29.9	-2.4	30.0	23.5	6.46	4.642	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-4.67	29.9	-2.4	30.0	23.1	6.91	4.340	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-4.67	29.9	-2.4	30.0	22.6	7.36	4.075	
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-4.67	29.9	-2.4	30.0	22.2	7.81	3.841	
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.1	-4.67	29.9	-2.4	30.0	21.7	8.26	3.632	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-4.67	29.9	-2.4	30.0	21.3	8.71	3.444	
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-4.67	29.9	-2.4	30.0	20.8	9.16	3.275	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-4.67	29.9	-2.4	30.0	20.4	9.61	3.122	
2,300.0	2,300.0	2,300.0	2,300.0	5.0	5.0	-4.67	29.9	-2.4	30.0	19.9	10.06	2.983	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-4.67	29.9	-2.4	30.0	19.5	10.51	2.855	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-4.67	29.9	-2.4	30.0	19.0	10.96	2.738	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-4.67	29.9	-2.4	30.0	18.6	11.41	2.630	
2,700.0	2,700.0	2,700.0	2,700.0	5.9	5.9	-4.67	29.9	-2.4	30.0	18.1	11.86	2.530	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-4.67	29.9	-2.4	30.0	17.7	12.31	2.438	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-4.67	29.9	-2.4	30.0	17.2	12.76	2.352	
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	-4.67	29.9	-2.4	30.0	16.8	13.21	2.272	
3,100.0	3,100.0	3,100.0	3,100.0	6.8	6.8	-4.67	29.9	-2.4	30.0	16.3	13.65	2.197	
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	-4.67	29.9	-2.4	30.0	15.9	14.10	2.127	
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	-4.67	29.9	-2.4	30.0	15.4	14.55	2.061	
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	-4.67	29.9	-2.4	30.0	15.0	15.00	2.000	Level 4
3,500.0	3,500.0	3,500.0	3,500.0	7.7	7.7	-4.67	29.9	-2.4	30.0	14.5	15.45	1.941	Level 4, CC
3,600.0	3,600.0	3,599.8	3,599.7	8.0	7.9	-1.44	30.4	-0.8	30.4	14.5	15.89	1.911	Level 4, ES
3,700.0	3,700.0	3,699.3	3,699.1	8.2	8.1	7.61	31.7	4.2	32.0	15.7	16.32	1.963	Level 4
3,800.0	3,800.0	3,798.3	3,797.8	8.4	8.4	20.22	34.0	12.5	36.3	19.6	16.74	2.169	
3,900.0	3,900.0	3,896.7	3,895.4	8.6	8.6	32.85	37.2	24.0	44.5	27.3	17.14	2.596	
4,000.0	4,000.0	3,994.1	3,991.6	8.9	8.8	43.12	41.2	38.5	57.0	39.5	17.51	3.256	
4,100.0	4,100.0	4,090.3	4,086.2	9.1	9.0	50.63	46.0	56.0	73.8	55.9	17.86	4.129	
4,200.0	4,200.0	4,185.5	4,179.0	9.3	9.3	55.96	51.5	76.3	94.4	76.2	18.21	5.185	
4,300.0	4,300.0	4,282.7	4,273.5	9.5	9.6	59.63	57.6	98.2	116.9	98.2	18.63	6.275	
4,400.0	4,400.0	4,380.0	4,368.0	9.7	9.9	62.12	63.6	120.2	139.7	120.6	19.05	7.330	
4,500.0	4,500.0	4,477.2	4,462.5	10.0	10.2	63.90	69.6	142.1	162.6	143.1	19.49	8.346	
4,600.0	4,600.0	4,574.4	4,557.1	10.2	10.5	65.25	75.6	164.1	185.7	165.8	19.92	9.321	
4,700.0	4,700.0	4,671.6	4,651.6	10.4	10.9	66.30	81.7	186.0	208.9	188.5	20.36	10.256	
4,800.0	4,800.0	4,768.8	4,746.1	10.6	11.2	67.13	87.7	208.0	232.1	211.3	20.81	11.153	
4,900.0	4,900.0	4,866.1	4,840.6	10.9	11.6	67.82	93.7	229.9	255.3	234.1	21.25	12.013	
5,000.0	5,000.0	4,963.3	4,935.1	11.1	12.0	68.39	99.8	251.9	278.6	256.9	21.70	12.837	
5,100.0	5,100.0	5,060.5	5,029.6	11.3	12.3	68.88	105.8	273.8	301.9	279.7	22.15	13.628	

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

SandRidge Energy

Anticollision Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Janet 0780 3-16H21 - Wellbore #1 - Design #1

Offset Site Error: 0.0 usft

Survey Program: 0-Sperry MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,200.0	5,157.7	5,124.2	11.5	12.7	69.29	111.8	295.8	325.2	302.6	22.61	14.386	
5,300.0	5,300.0	5,254.9	5,218.7	11.8	13.1	69.65	117.9	317.8	348.5	325.5	23.06	15.114	
5,400.0	5,400.0	5,352.1	5,313.2	12.0	13.5	69.96	123.9	339.7	371.9	348.4	23.52	15.813	
5,500.0	5,500.0	5,449.4	5,407.7	12.2	13.9	70.24	129.9	361.7	395.2	371.3	23.98	16.485	
5,600.0	5,600.0	5,546.6	5,502.2	12.4	14.3	70.48	136.0	383.6	418.6	394.1	24.44	17.130	
5,700.0	5,700.0	5,643.8	5,596.7	12.7	14.8	70.70	142.0	405.6	441.9	417.1	24.90	17.751	
5,800.0	5,800.0	5,741.0	5,691.2	12.9	15.2	70.90	148.0	427.5	465.3	440.0	25.36	18.349	
5,900.0	5,900.0	5,838.2	5,785.8	13.1	15.6	71.08	154.1	449.5	488.7	462.9	25.82	18.924	
6,000.0	6,000.0	5,935.5	5,880.3	13.3	16.0	71.24	160.1	471.4	512.1	485.8	26.29	19.478	
6,100.0	6,100.0	6,033.1	5,975.2	13.6	16.5	-18.53	166.1	493.5	533.8	507.1	26.74	19.962	
6,200.0	6,199.8	6,131.3	6,070.7	13.8	16.9	-18.44	172.2	515.7	552.4	525.2	27.19	20.317	
6,300.0	6,299.5	6,230.1	6,166.8	14.0	17.4	-18.49	178.4	538.0	567.6	540.0	27.64	20.539	
6,400.0	6,398.7	6,329.4	6,263.2	14.2	17.8	-18.67	184.5	560.4	579.6	551.5	28.09	20.632	
6,431.2	6,429.6	6,360.4	6,293.4	14.2	17.9	-18.75	186.5	567.4	582.7	554.5	28.24	20.637	
6,500.0	6,497.6	6,428.9	6,360.0	14.4	18.3	-18.97	190.7	582.9	589.1	560.6	28.55	20.632	
6,600.0	6,596.5	6,528.4	6,456.7	14.6	18.7	-19.29	196.9	605.3	598.5	569.5	29.02	20.622	
6,700.0	6,695.3	6,627.9	6,553.4	14.8	19.2	-19.60	203.0	627.8	607.9	578.4	29.49	20.611	
6,800.0	6,794.2	6,727.4	6,650.2	15.1	19.6	-19.90	209.2	650.3	617.3	587.3	29.97	20.599	
6,908.7	6,901.7	6,835.6	6,755.4	15.3	20.1	-20.22	215.9	674.7	627.5	597.0	30.49	20.583	
6,950.0	6,942.5	6,876.5	6,795.2	15.4	20.3	-45.66	218.5	683.9	631.9	601.2	30.68	20.597	
7,000.0	6,991.6	6,925.5	6,842.8	15.5	20.6	-66.96	221.5	695.0	638.8	607.8	30.92	20.658	
7,050.0	7,040.0	6,973.6	6,889.6	15.6	20.8	-79.21	224.5	705.9	647.3	616.1	31.18	20.763	
7,100.0	7,087.4	7,020.4	6,935.0	15.8	21.0	-86.61	227.4	716.4	657.6	626.2	31.45	20.909	
7,150.0	7,133.4	7,070.3	6,983.6	15.9	21.2	-91.62	230.4	727.7	669.9	638.1	31.79	21.075	
7,200.0	7,177.7	7,167.1	7,077.7	16.0	21.6	-96.50	226.6	749.4	682.3	650.0	32.36	21.086	
7,250.0	7,219.8	7,275.0	7,180.3	16.1	21.9	-100.18	203.4	772.6	693.0	660.2	32.84	21.105	
7,300.0	7,259.6	7,393.1	7,285.7	16.3	22.3	-102.74	155.9	795.8	701.1	668.0	33.17	21.138	
7,350.0	7,296.6	7,518.0	7,384.4	16.4	22.5	-104.16	82.8	817.0	706.2	672.8	33.38	21.153	
7,400.0	7,330.7	7,644.6	7,466.4	16.6	22.8	-104.45	-11.9	833.9	707.7	674.2	33.53	21.105	
7,450.0	7,361.5	7,767.2	7,524.8	16.8	23.1	-103.74	-118.7	845.1	705.9	672.1	33.82	20.873	
7,500.0	7,388.8	7,881.1	7,558.1	17.1	23.5	-102.29	-227.3	850.4	701.3	667.0	34.28	20.460	
7,550.0	7,412.4	7,984.1	7,569.8	17.4	23.9	-100.38	-329.6	850.8	694.5	659.6	34.92	19.887	
7,600.0	7,432.2	8,038.0	7,570.0	17.8	24.2	-99.71	-383.4	849.7	687.4	651.6	35.77	19.220	
7,650.0	7,447.9	8,085.4	7,570.0	18.1	24.5	-99.27	-430.8	848.7	682.1	645.4	36.66	18.608	
7,700.0	7,459.5	8,133.9	7,570.0	18.6	24.8	-98.90	-479.4	847.6	678.4	640.8	37.61	18.035	
7,750.0	7,466.9	8,183.4	7,570.0	19.0	25.2	-98.63	-528.8	846.5	676.1	637.5	38.61	17.513	
7,800.0	7,469.9	8,233.3	7,570.0	19.5	25.6	-98.51	-578.7	845.4	675.2	635.6	39.65	17.030	
7,810.5	7,470.0	8,243.7	7,570.0	19.6	25.6	-98.51	-589.2	845.2	675.2	635.3	39.87	16.935	
7,810.6	7,470.0	8,243.9	7,570.0	19.6	25.6	-98.51	-589.3	845.2	675.2	635.3	39.87	16.934	
7,900.0	7,470.0	8,333.3	7,570.0	20.6	26.4	-98.51	-678.7	843.3	675.2	633.3	41.85	16.134	
8,000.0	7,470.0	8,433.3	7,570.0	21.8	27.4	-98.51	-778.6	841.1	675.2	630.9	44.27	15.253	
8,100.0	7,470.0	8,533.3	7,570.0	23.1	28.6	-98.51	-878.6	838.9	675.2	628.3	46.87	14.406	
8,200.0	7,470.0	8,633.3	7,570.0	24.5	29.8	-98.51	-978.6	836.7	675.2	625.6	49.63	13.605	
8,300.0	7,470.0	8,733.3	7,570.0	26.0	31.0	-98.51	-1,078.6	834.5	675.2	622.7	52.52	12.856	
8,400.0	7,470.0	8,833.3	7,570.0	27.5	32.4	-98.51	-1,178.5	832.3	675.2	619.7	55.52	12.161	
8,500.0	7,470.0	8,933.3	7,570.0	29.0	33.8	-98.51	-1,278.5	830.2	675.2	616.6	58.62	11.519	
8,600.0	7,470.0	9,033.3	7,570.0	30.6	35.2	-98.51	-1,378.5	828.0	675.2	613.4	61.80	10.927	
8,700.0	7,470.0	9,133.3	7,570.0	32.2	36.7	-98.51	-1,478.5	825.8	675.2	610.2	65.04	10.382	
8,800.0	7,470.0	9,233.3	7,570.0	33.9	38.3	-98.51	-1,578.4	823.6	675.2	606.9	68.34	9.880	
8,900.0	7,470.0	9,333.3	7,570.0	35.6	39.9	-98.51	-1,678.4	821.4	675.3	603.6	71.69	9.419	
9,000.0	7,470.0	9,433.3	7,570.0	37.3	41.5	-98.51	-1,778.4	819.2	675.3	600.2	75.09	8.993	
9,100.0	7,470.0	9,533.3	7,570.0	39.0	43.1	-98.51	-1,878.4	817.1	675.3	596.7	78.52	8.600	

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Janet 0780 3-16H21 - Wellbore #1 - Design #1

Offset Site Error: 0.0 usft

Survey Program: 0-Sperry MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,200.0	7,470.0	9,633.3	7,570.0	40.8	44.8	-98.51	-1,978.3	814.9	675.3	593.3	81.99	8.236	
9,300.0	7,470.0	9,733.3	7,570.0	42.6	46.4	-98.51	-2,078.3	812.7	675.3	589.8	85.49	7.899	
9,400.0	7,470.0	9,833.3	7,570.0	44.3	48.1	-98.51	-2,178.3	810.5	675.3	586.3	89.01	7.587	
9,500.0	7,470.0	9,933.3	7,570.0	46.1	49.8	-98.51	-2,278.3	808.3	675.3	582.7	92.55	7.296	
9,600.0	7,470.0	10,033.3	7,570.0	47.9	51.6	-98.51	-2,378.2	806.1	675.3	579.2	96.12	7.026	
9,700.0	7,470.0	10,133.3	7,570.0	49.7	53.3	-98.51	-2,478.2	804.0	675.3	575.6	99.70	6.773	
9,800.0	7,470.0	10,233.3	7,570.0	51.6	55.1	-98.51	-2,578.2	801.8	675.3	572.0	103.30	6.538	
9,900.0	7,470.0	10,333.3	7,570.0	53.4	56.8	-98.51	-2,678.2	799.6	675.3	568.4	106.91	6.317	
10,000.0	7,470.0	10,433.3	7,570.0	55.2	58.6	-98.51	-2,778.2	797.4	675.3	564.8	110.54	6.109	
10,100.0	7,470.0	10,533.3	7,570.0	57.0	60.4	-98.51	-2,878.1	795.2	675.3	561.2	114.18	5.915	
10,200.0	7,470.0	10,633.3	7,570.0	58.9	62.2	-98.51	-2,978.1	793.0	675.3	557.5	117.82	5.732	
10,300.0	7,470.0	10,733.3	7,570.0	60.7	64.0	-98.51	-3,078.1	790.9	675.3	553.9	121.48	5.559	
10,400.0	7,470.0	10,833.3	7,570.0	62.6	65.8	-98.51	-3,178.1	788.7	675.4	550.2	125.15	5.396	
10,500.0	7,470.0	10,933.3	7,570.0	64.4	67.6	-98.51	-3,278.0	786.5	675.4	546.5	128.83	5.242	
10,600.0	7,470.0	11,033.3	7,570.0	66.3	69.4	-98.51	-3,378.0	784.3	675.4	542.9	132.51	5.097	
10,700.0	7,470.0	11,133.3	7,570.0	68.2	71.2	-98.51	-3,478.0	782.1	675.4	539.2	136.20	4.959	
10,800.0	7,470.0	11,233.3	7,570.0	70.0	73.0	-98.51	-3,578.0	779.9	675.4	535.5	139.90	4.828	
10,900.0	7,470.0	11,333.3	7,570.0	71.9	74.9	-98.51	-3,677.9	777.8	675.4	531.8	143.60	4.703	
11,000.0	7,470.0	11,433.3	7,570.0	73.8	76.7	-98.51	-3,777.9	775.6	675.4	528.1	147.31	4.585	
11,100.0	7,470.0	11,533.3	7,570.0	75.6	78.6	-98.51	-3,877.9	773.4	675.4	524.4	151.02	4.472	
11,200.0	7,470.0	11,633.3	7,570.0	77.5	80.4	-98.51	-3,977.9	771.2	675.4	520.7	154.74	4.365	
11,300.0	7,470.0	11,733.3	7,570.0	79.4	82.3	-98.51	-4,077.8	769.0	675.4	517.0	158.46	4.262	
11,400.0	7,470.0	11,833.3	7,570.0	81.3	84.1	-98.51	-4,177.8	766.8	675.4	513.2	162.18	4.165	
11,500.0	7,470.0	11,933.3	7,570.0	83.2	86.0	-98.51	-4,277.8	764.7	675.4	509.5	165.91	4.071	
11,600.0	7,470.0	12,033.3	7,570.0	85.1	87.8	-98.51	-4,377.8	762.5	675.4	505.8	169.65	3.981	
11,700.0	7,470.0	12,133.3	7,570.0	86.9	89.7	-98.51	-4,477.7	760.3	675.4	502.1	173.38	3.896	
11,800.0	7,470.0	12,233.3	7,570.0	88.8	91.5	-98.51	-4,577.7	758.1	675.4	498.3	177.12	3.813	
11,900.0	7,470.0	12,333.3	7,570.0	90.7	93.4	-98.51	-4,677.7	755.9	675.5	494.6	180.86	3.735	
12,000.0	7,470.0	12,433.3	7,570.0	92.6	95.3	-98.51	-4,777.7	753.7	675.5	490.9	184.61	3.659	
12,100.0	7,470.0	12,533.3	7,570.0	94.5	97.1	-98.51	-4,877.7	751.6	675.5	487.1	188.36	3.586	
12,200.0	7,470.0	12,633.3	7,570.0	96.4	99.0	-98.51	-4,977.6	749.4	675.5	483.4	192.10	3.516	
12,300.0	7,470.0	12,733.3	7,570.0	98.3	100.9	-98.51	-5,077.6	747.2	675.5	479.6	195.86	3.449	
12,400.0	7,470.0	12,833.3	7,570.0	100.2	102.8	-98.51	-5,177.6	745.0	675.5	475.9	199.61	3.384	
12,500.0	7,470.0	12,933.3	7,570.0	102.1	104.6	-98.51	-5,277.6	742.8	675.5	472.1	203.37	3.322	
12,600.0	7,470.0	13,033.3	7,570.0	104.0	106.5	-98.51	-5,377.5	740.7	675.5	468.4	207.13	3.261	
12,700.0	7,470.0	13,133.3	7,570.0	105.9	108.4	-98.51	-5,477.5	738.5	675.5	464.6	210.89	3.203	
12,800.0	7,470.0	13,233.3	7,570.0	107.8	110.3	-98.51	-5,577.5	736.3	675.5	460.9	214.65	3.147	
12,900.0	7,470.0	13,333.3	7,570.0	109.7	112.2	-98.51	-5,677.5	734.1	675.5	457.1	218.41	3.093	
13,000.0	7,470.0	13,433.3	7,570.0	111.6	114.1	-98.51	-5,777.4	731.9	675.5	453.3	222.17	3.041	
13,100.0	7,470.0	13,533.3	7,570.0	113.5	115.9	-98.51	-5,877.4	729.7	675.5	449.6	225.94	2.990	
13,200.0	7,470.0	13,633.3	7,570.0	115.4	117.8	-98.51	-5,977.4	727.6	675.5	445.8	229.71	2.941	
13,300.0	7,470.0	13,733.3	7,570.0	117.3	119.7	-98.51	-6,077.4	725.4	675.5	442.1	233.48	2.893	
13,400.0	7,470.0	13,833.3	7,570.0	119.2	121.6	-98.51	-6,177.3	723.2	675.6	438.3	237.25	2.847	
13,500.0	7,470.0	13,933.3	7,570.0	121.1	123.5	-98.51	-6,277.3	721.0	675.6	434.5	241.02	2.803	
13,600.0	7,470.0	14,033.3	7,570.0	123.0	125.4	-98.51	-6,377.3	718.8	675.6	430.8	244.79	2.760	
13,700.0	7,470.0	14,133.3	7,570.0	124.9	127.3	-98.51	-6,477.3	716.6	675.6	427.0	248.57	2.718	
13,800.0	7,470.0	14,233.3	7,570.0	126.8	129.2	-98.50	-6,577.2	714.5	675.6	423.2	252.34	2.677	
13,900.0	7,470.0	14,333.3	7,570.0	128.7	131.1	-98.50	-6,677.2	712.3	675.6	419.5	256.12	2.638	
14,000.0	7,470.0	14,433.3	7,570.0	130.6	133.0	-98.50	-6,777.2	710.1	675.6	415.7	259.89	2.600	
14,100.0	7,470.0	14,533.3	7,570.0	132.5	134.9	-98.50	-6,877.2	707.9	675.6	411.9	263.67	2.562	
14,200.0	7,470.0	14,633.3	7,570.0	134.4	136.8	-98.50	-6,977.2	705.7	675.6	408.2	267.45	2.526	
14,300.0	7,470.0	14,733.3	7,570.0	136.3	138.7	-98.50	-7,077.1	703.5	675.6	404.4	271.23	2.491	

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design T7N-R80W-S9 - Janet 0780 3-16H21 - Wellbore #1 - Design #1 — **Offset Site Error:** 0.0 usft

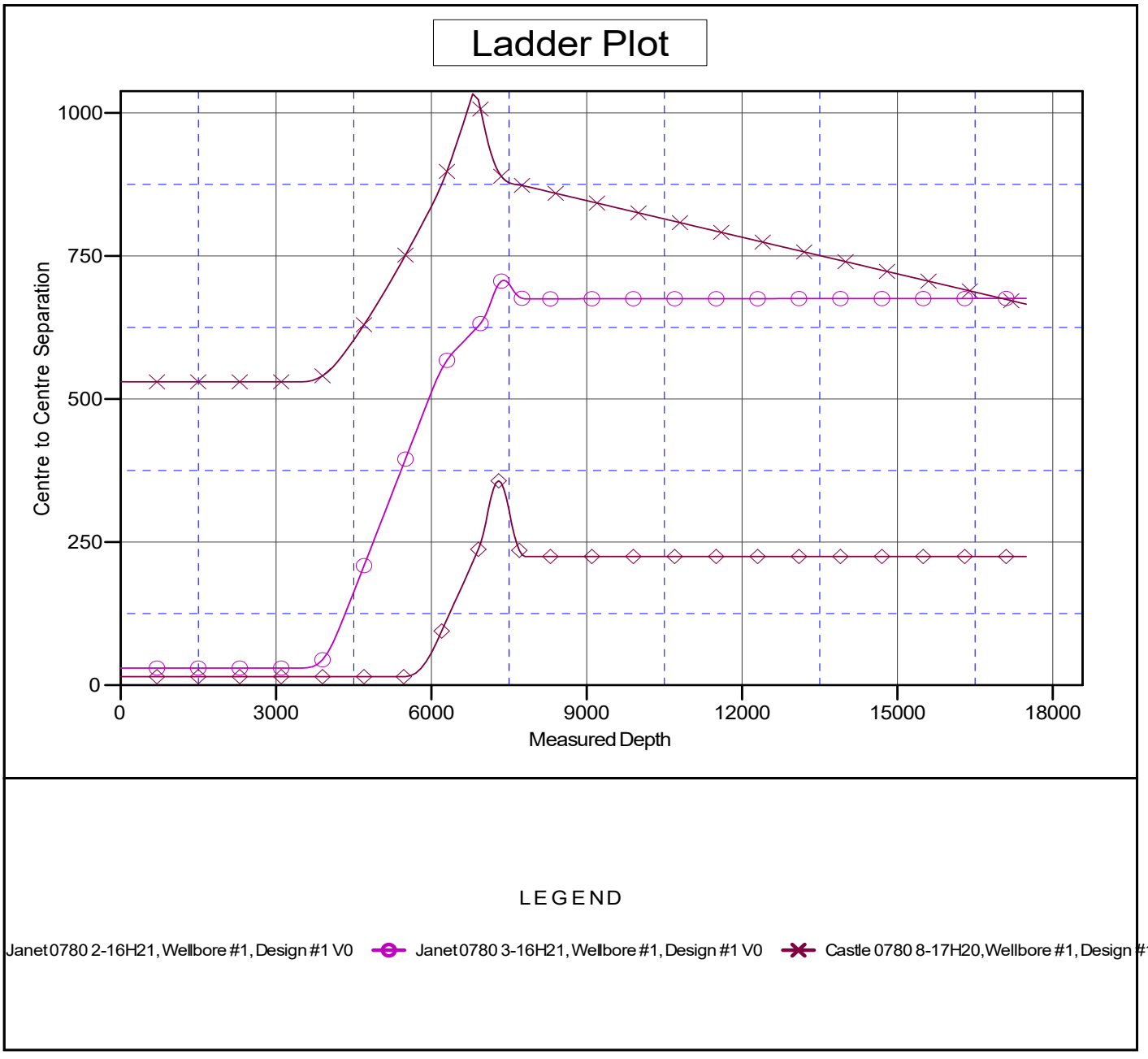
Survey Program: 0-Sperry MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,400.0	7,470.0	14,833.3	7,570.0	138.2	140.6	-98.50	-7,177.1	701.4	675.6	400.6	275.01	2.457	
14,500.0	7,470.0	14,933.3	7,570.0	140.2	142.4	-98.50	-7,277.1	699.2	675.6	396.8	278.79	2.423	
14,600.0	7,470.0	15,033.3	7,570.0	142.1	144.3	-98.50	-7,377.1	697.0	675.6	393.1	282.57	2.391	
14,700.0	7,470.0	15,133.3	7,570.0	144.0	146.2	-98.50	-7,477.0	694.8	675.6	389.3	286.35	2.359	
14,800.0	7,470.0	15,233.3	7,570.0	145.9	148.1	-98.50	-7,577.0	692.6	675.6	385.5	290.13	2.329	
14,900.0	7,470.0	15,333.3	7,570.0	147.8	150.0	-98.50	-7,677.0	690.4	675.7	381.7	293.92	2.299	
15,000.0	7,470.0	15,433.3	7,570.0	149.7	151.9	-98.50	-7,777.0	688.3	675.7	378.0	297.70	2.270	
15,100.0	7,470.0	15,533.3	7,570.0	151.6	153.9	-98.50	-7,876.9	686.1	675.7	374.2	301.49	2.241	
15,200.0	7,470.0	15,633.3	7,570.0	153.5	155.8	-98.50	-7,976.9	683.9	675.7	370.4	305.27	2.213	
15,300.0	7,470.0	15,733.3	7,570.0	155.4	157.7	-98.50	-8,076.9	681.7	675.7	366.6	309.06	2.186	
15,400.0	7,470.0	15,833.3	7,570.0	157.3	159.6	-98.50	-8,176.9	679.5	675.7	362.8	312.85	2.160	
15,500.0	7,470.0	15,933.3	7,570.0	159.3	161.5	-98.50	-8,276.8	677.3	675.7	359.1	316.63	2.134	
15,600.0	7,470.0	16,033.3	7,570.0	161.2	163.4	-98.50	-8,376.8	675.2	675.7	355.3	320.42	2.109	
15,700.0	7,470.0	16,133.3	7,570.0	163.1	165.3	-98.50	-8,476.8	673.0	675.7	351.5	324.21	2.084	
15,800.0	7,470.0	16,233.3	7,570.0	165.0	167.2	-98.50	-8,576.8	670.8	675.7	347.7	328.00	2.060	
15,900.0	7,470.0	16,333.3	7,570.0	166.9	169.1	-98.50	-8,676.7	668.6	675.7	343.9	331.79	2.037	
16,000.0	7,470.0	16,433.3	7,570.0	168.8	171.0	-98.50	-8,776.7	666.4	675.7	340.1	335.57	2.014	
16,100.0	7,470.0	16,533.3	7,570.0	170.7	172.9	-98.50	-8,876.7	664.2	675.7	336.4	339.36	1.991	Level 4
16,200.0	7,470.0	16,633.3	7,570.0	172.6	174.8	-98.50	-8,976.7	662.1	675.7	332.6	343.15	1.969	Level 4
16,300.0	7,470.0	16,733.3	7,570.0	174.6	176.7	-98.50	-9,076.7	659.9	675.7	328.8	346.95	1.948	Level 4
16,400.0	7,470.0	16,833.3	7,570.0	176.5	178.6	-98.50	-9,176.6	657.7	675.7	325.0	350.74	1.927	Level 4
16,500.0	7,470.0	16,933.3	7,570.0	178.4	180.5	-98.50	-9,276.6	655.5	675.8	321.2	354.53	1.906	Level 4
16,600.0	7,470.0	17,033.3	7,570.0	180.3	182.4	-98.50	-9,376.6	653.3	675.8	317.4	358.32	1.886	Level 4
16,700.0	7,470.0	17,133.3	7,570.0	182.2	184.3	-98.50	-9,476.6	651.1	675.8	313.7	362.11	1.866	Level 4
16,800.0	7,470.0	17,233.3	7,570.0	184.1	186.2	-98.50	-9,576.5	649.0	675.8	309.9	365.90	1.847	Level 4
16,900.0	7,470.0	17,333.3	7,570.0	186.0	188.2	-98.50	-9,676.5	646.8	675.8	306.1	369.70	1.828	Level 4
17,000.0	7,470.0	17,433.3	7,570.0	188.0	190.1	-98.50	-9,776.5	644.6	675.8	302.3	373.49	1.809	Level 4
17,100.0	7,470.0	17,533.3	7,570.0	189.9	192.0	-98.50	-9,876.5	642.4	675.8	298.5	377.28	1.791	Level 4
17,200.0	7,470.0	17,633.3	7,570.0	191.8	193.9	-98.50	-9,976.4	640.2	675.8	294.7	381.08	1.773	Level 4
17,300.0	7,470.0	17,733.3	7,570.0	193.7	195.8	-98.50	-10,076.4	638.1	675.8	290.9	384.87	1.756	Level 4
17,400.0	7,470.0	17,833.3	7,570.0	195.6	197.7	-98.50	-10,176.4	635.9	675.8	287.2	388.66	1.739	Level 4
17,408.1	7,470.0	17,841.4	7,570.0	195.7	197.9	-98.50	-10,184.5	635.7	675.8	286.9	388.94	1.738	Level 4
17,488.0	7,470.0	17,919.2	7,570.0	197.0	199.4	-98.50	-10,262.3	634.0	675.8	284.1	391.70	1.725	Level 4
17,488.6	7,470.0	17,919.2	7,570.0	197.0	199.4	-98.50	-10,262.3	634.0	675.8	284.1	391.72	1.725	Level 4, SF

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S9	**MD Reference:**	WELL @ 8151.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 8151.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Janet 0780 1-16H21
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.57°



Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 1-16H21
Project:	North Park Basin	**TVD Reference:**	WELL @ 8151.0usft (Original Well Elev)
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Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Janet 0780 1-16H21	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDMProd
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 8151.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Janet 0780 1-16H21
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.57°