SandRidge Energy

North Park Basin
T7N-R80W-S9
Janet 0780 2-16H21

Wellbore #1
Design #1

Anticollision Summary Report

18 December, 2017

SandRidge Energy

Anticollision Summary Report

Company:	SandRidge Energy	**Local Co-ordinate Reference:**	Well Janet 0780 2-16H21
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 2-16H21	**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	18,016.7	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-S16						
Pintail SWD 0780 1-16D - Wellbore #1 - 33 deg	8,783.1	8,587.9	1,454.6	1,373.9	18.017	CC
Pintail SWD 0780 1-16D - Wellbore #1 - 33 deg	8,800.0	8,577.7	1,454.7	1,373.8	17.992	ES
Pintail SWD 0780 1-16D - Wellbore #1 - 33 deg	9,000.0	8,457.4	1,464.9	1,382.9	17.867	SF
Pintail SWD 0780 2-16D - Wellbore #1 - Design #1	11,653.2	6,544.1	2,892.8	2,809.7	34.822	CC
Pintail SWD 0780 2-16D - Wellbore #1 - Design #1	11,700.0	6,546.7	2,893.2	2,809.2	34.447	ES
Pintail SWD 0780 2-16D - Wellbore #1 - Design #1	12,800.0	6,607.5	3,111.2	3,009.0	30.440	SF
Pintail SWD 0780 3-16D - Wellbore #1 - Design #1	12,155.4	7,864.2	1,106.7	1,005.7	10.964	CC
Pintail SWD 0780 3-16D - Wellbore #1 - Design #1	12,200.0	7,870.6	1,107.5	1,004.9	10.788	ES
Pintail SWD 0780 3-16D - Wellbore #1 - Design #1	12,500.0	7,913.6	1,158.0	1,045.2	10.267	SF
T7N-R80W-S9						
Castle 0780 5-17H20 - Wellbore #1 - Design #1	2,500.0	2,483.0	534.2	523.3	48.877	CC
Castle 0780 5-17H20 - Wellbore #1 - Design #1	2,600.0	2,581.2	534.3	523.0	47.021	ES
Castle 0780 5-17H20 - Wellbore #1 - Design #1	18,016.7	18,914.0	2,644.7	2,238.4	6.509	SF
Castle 0780 6-17H20 - Wellbore #1 - Design #1	2,608.8	2,593.8	527.5	516.0	46.186	CC
Castle 0780 6-17H20 - Wellbore #1 - Design #1	2,800.0	2,781.6	527.9	515.6	43.108	ES
Castle 0780 6-17H20 - Wellbore #1 - Design #1	18,016.7	18,578.5	1,985.7	1,580.4	4.899	SF
Castle 0780 7-17H20 - Wellbore #1 - Design #1	2,800.0	2,785.0	521.1	508.8	42.433	CC
Castle 0780 7-17H20 - Wellbore #1 - Design #1	2,900.0	2,881.4	521.4	508.7	41.012	ES
Castle 0780 7-17H20 - Wellbore #1 - Design #1	18,016.7	18,354.3	1,328.0	923.0	3.279	SF
Castle 0780 8-17H20 - Wellbore #1 - Design #1	3,500.0	3,483.0	515.1	499.6	33.392	CC
Castle 0780 8-17H20 - Wellbore #1 - Design #1	18,016.7	18,294.6	674.9	274.3	1.684	Level 4, ES, SF
Gregory 0780 1-9H - Wellbore #1 - Wellbore #1	7,323.7	7,387.0	156.9	125.0	4.924	CC, ES, SF
Gregory 0780 2-9H - Wellbore #1 - Design #1	4,680.7	4,673.0	352.0	331.3	16.978	CC
Gregory 0780 2-9H - Wellbore #1 - Design #1	4,700.0	4,691.6	352.1	331.2	16.900	ES
Gregory 0780 2-9H - Wellbore #1 - Design #1	5,100.0	5,076.9	369.7	346.7	16.109	SF
Gregory 0780 3-9H - Wellbore #1 - Design #1	3,303.1	3,287.3	351.5	337.0	24.295	CC
Gregory 0780 3-9H - Wellbore #1 - Design #1	3,400.0	3,382.8	351.8	336.9	23.604	ES
Gregory 0780 3-9H - Wellbore #1 - Design #1	3,900.0	3,859.1	377.6	360.2	21.692	SF
Gregory 0780 4-9H - Wellbore #1 - Design #1	2,500.0	2,483.0	338.0	327.1	30.929	CC
Gregory 0780 4-9H - Wellbore #1 - Design #1	2,700.0	2,681.8	338.4	326.6	28.693	ES
Gregory 0780 4-9H - Wellbore #1 - Design #1	3,400.0	3,352.2	368.6	353.6	24.490	SF
Janet 0780 1-16H21 - 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	15.0	-0.5	0.971	Level 1, CC
Janet 0780 3-16H21 - Wellbore #1 - Design #1	3,600.0	3,599.9	15.4	-0.5	0.970	Level 1, ES, SF
Janet 0780 4-16H21 - Wellbore #1 - Design #1	2,800.0	2,800.0	30.0	17.7	2.438	CC
Janet 0780 4-16H21 - Wellbore #1 - Design #1	2,900.0	2,899.9	30.1	17.4	2.362	ES

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

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T7N-R80W-S9						
Janet 0780 4-16H21 - Wellbore #1 - Design #1	3,000.0	2,999.6	31.0	17.8	2.353	SF
Mutual 0780 5-8H - Wellbore #1 - Design #1	2,912.2	2,896.5	663.9	651.2	52.162	CC
Mutual 0780 5-8H - Wellbore #1 - Design #1	3,000.0	2,983.0	664.0	650.9	50.570	ES
Mutual 0780 5-8H - Wellbore #1 - Design #1	4,600.0	4,482.0	845.3	822.4	36.941	SF
Mutual 0780 6-8H - Wellbore #1 - Design #1	4,089.6	4,099.1	635.3	616.3	33.456	CC
Mutual 0780 6-8H - Wellbore #1 - Design #1	4,200.0	4,205.9	635.9	616.2	32.299	ES
Mutual 0780 6-8H - Wellbore #1 - Design #1	5,700.0	5,655.4	753.7	725.0	26.252	SF
Mutual 0780 7-8H - Wellbore #1 - Design #1	5,101.5	5,123.8	609.0	585.0	25.353	CC
Mutual 0780 7-8H - Wellbore #1 - Design #1	5,200.0	5,218.9	609.6	584.9	24.718	ES
Mutual 0780 7-8H - Wellbore #1 - Design #1	6,100.0	6,069.7	650.1	620.3	21.756	SF
Mutual 0780 8-8H - Wellbore #1 - Design #1	6,318.6	6,322.4	467.6	437.3	15.467	CC, ES
Mutual 0780 8-8H - Wellbore #1 - Design #1	6,500.0	6,486.2	474.0	442.9	15.226	SF

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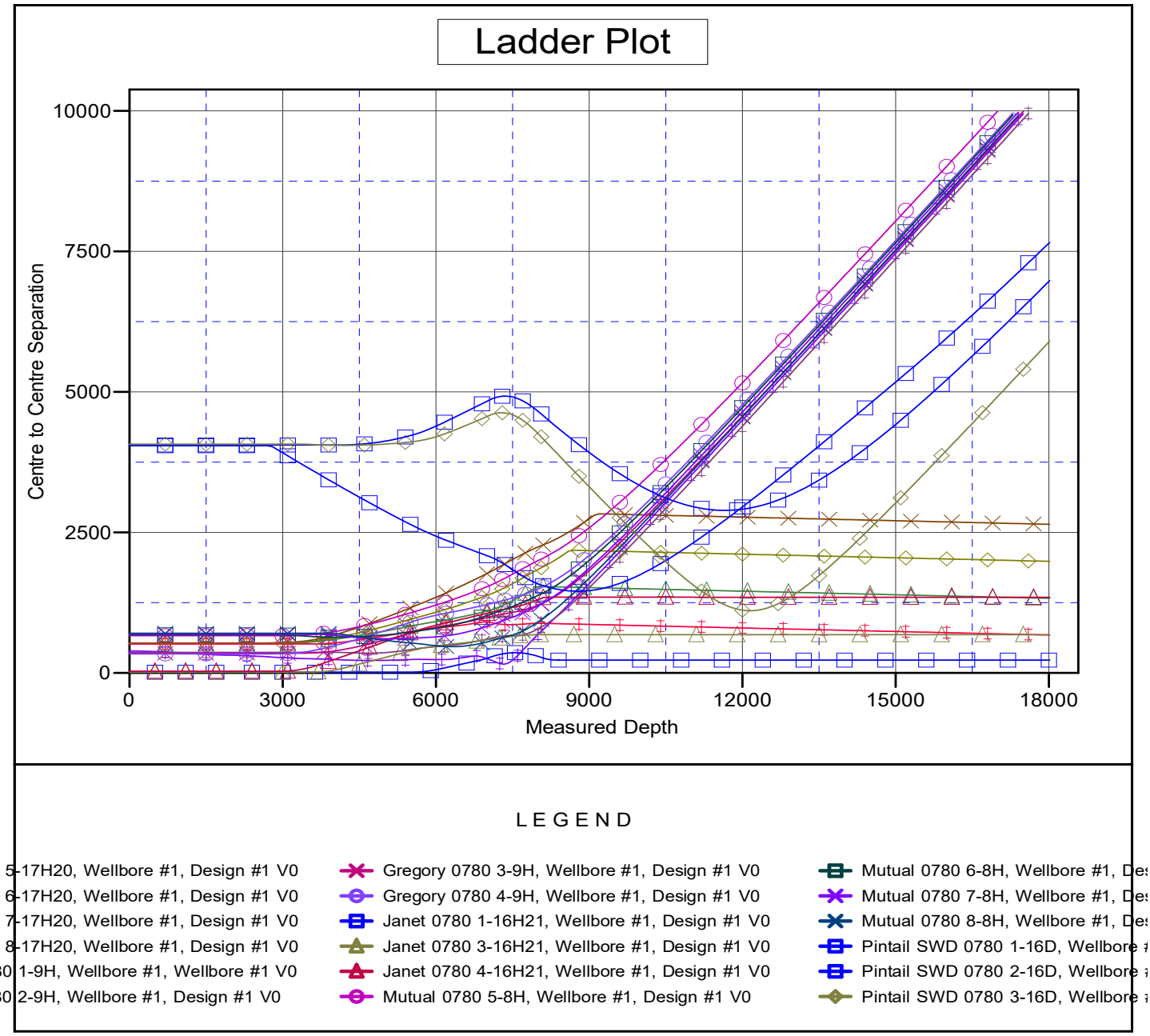
Reference Depths are relative to WELL @ 8151.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Janet 0780 2-16H21
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.57°



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