

SandRidge Energy

North Park Basin

T7N-R80W-S9

Castle 0780 8-17H20

Wellbore #1

Design #1

Anticollision Summary Report

29 August, 2016

SandRidge Energy

Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 8-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8134.0usft
Reference Site:	T7N-R80W-S9	MD Reference:	WELL @ 8134.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Castle 0780 8-17H20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMProd
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	8/10/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,064.5	Design #1 (Wellbore #1)	Sperry MWD	Fixed:v2:standard declination

Summary	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Site Name Offset Well - Wellbore - Design						
T7N-R80W-S9						
Castle 0780 5-17H20 - Wellbore #1 - Design #1	2,500.0	2,500.0	45.4	34.4	4.132	CC, ES
Castle 0780 5-17H20 - Wellbore #1 - Design #1	2,600.0	2,598.5	47.0	35.6	4.117	SF
Castle 0780 6-17H20 - Wellbore #1 - Design #1	2,630.6	2,632.6	30.2	18.7	2.614	CC, ES
Castle 0780 6-17H20 - Wellbore #1 - Design #1	2,700.0	2,701.5	30.7	18.8	2.585	SF
Castle 0780 7-17H20 - Wellbore #1 - Design #1	2,766.0	2,768.0	15.1	2.9	1.242	Level 2, CC
Castle 0780 7-17H20 - Wellbore #1 - Design #1	2,800.0	2,802.0	15.1	2.8	1.227	Level 2, ES, SF
Gregory 0780 1-9H - Wellbore #1 - Wellbore #1	0.0	3.0	168.5			
Gregory 0780 1-9H - Wellbore #1 - Wellbore #1	100.0	102.4	168.6	168.4	844.790	ES
Gregory 0780 1-9H - Wellbore #1 - Wellbore #1	4,000.0	3,993.6	326.1	308.9	18.969	SF
Gregory 0780 2-9H - Wellbore #1 - Design #1	3,500.0	3,500.0	160.4	145.0	10.368	CC, ES
Gregory 0780 2-9H - Wellbore #1 - Design #1	3,700.0	3,699.8	165.4	149.1	10.125	SF
Gregory 0780 3-9H - Wellbore #1 - Design #1	2,900.0	2,900.0	171.9	159.2	13.458	CC, ES
Gregory 0780 3-9H - Wellbore #1 - Design #1	3,200.0	3,190.9	179.5	165.4	12.784	SF
Gregory 0780 4-9H - Wellbore #1 - Design #1	2,500.0	2,500.0	183.9	173.0	16.756	CC, ES
Gregory 0780 4-9H - Wellbore #1 - Design #1	2,900.0	2,890.2	193.7	181.0	15.266	SF
Mutual 0780 5-8H - Wellbore #1 - Design #1	2,928.0	2,929.6	148.9	136.1	11.614	CC, ES
Mutual 0780 5-8H - Wellbore #1 - Design #1	3,100.0	3,098.0	152.0	138.4	11.188	SF
Mutual 0780 6-8H - Wellbore #1 - Design #1	3,498.5	3,505.6	142.6	127.3	9.305	CC
Mutual 0780 6-8H - Wellbore #1 - Design #1	4,235.2	4,228.0	144.5	125.9	7.749	ES
Mutual 0780 6-8H - Wellbore #1 - Design #1	4,400.0	4,390.3	147.3	128.1	7.644	SF
Mutual 0780 7-8H - Wellbore #1 - Design #1	4,735.9	4,747.2	19.2	-1.5	0.928	Level 1, CC, ES, SF
Mutual 0780 8-8H - Wellbore #1 - Design #1	4,726.9	4,744.5	130.7	110.1	6.346	CC, ES
Mutual 0780 8-8H - Wellbore #1 - Design #1	7,722.8	7,550.0	179.1	143.7	5.062	SF

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

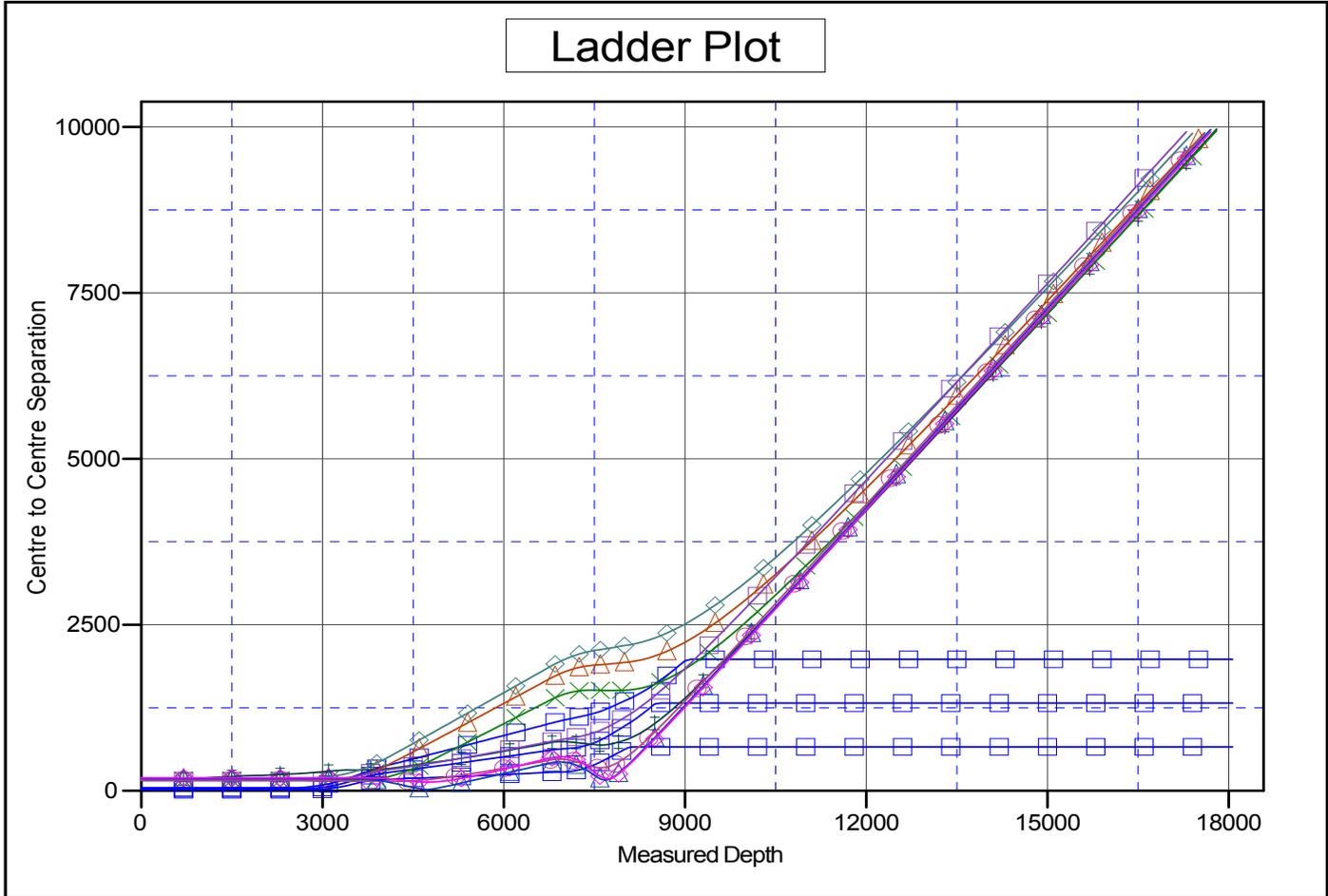
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Reference Wellbore: Wellbore #1	Database: EDMProd
Reference Design: Design #1	Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 8134.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Castle 0780 8-17H20
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: -0.57°



LEGEND

- Castle 0780 5-17H20, Wellbore #1, Design #1 V0
- ✖ Gregory 0780 2-9H, Wellbore #1, Design #1 V0
- ⊖ Mutual 0780 6-8H, Wellbore #1, Design #1 V0
- Castle 0780 6-17H20, Wellbore #1, Design #1 V0
- △ Gregory 0780 3-9H, Wellbore #1, Design #1 V0
- △ Mutual 0780 7-8H, Wellbore #1, Design #1 V0
- Castle 0780 7-17H20, Wellbore #1, Design #1 V0
- ◇ Gregory 0780 4-9H, Wellbore #1, Design #1 V0
- ◇ Mutual 0780 8-8H, Wellbore #1, Design #1 V0
- Gregory 0780 1-9H, Wellbore #1, Wellbore #1 V0
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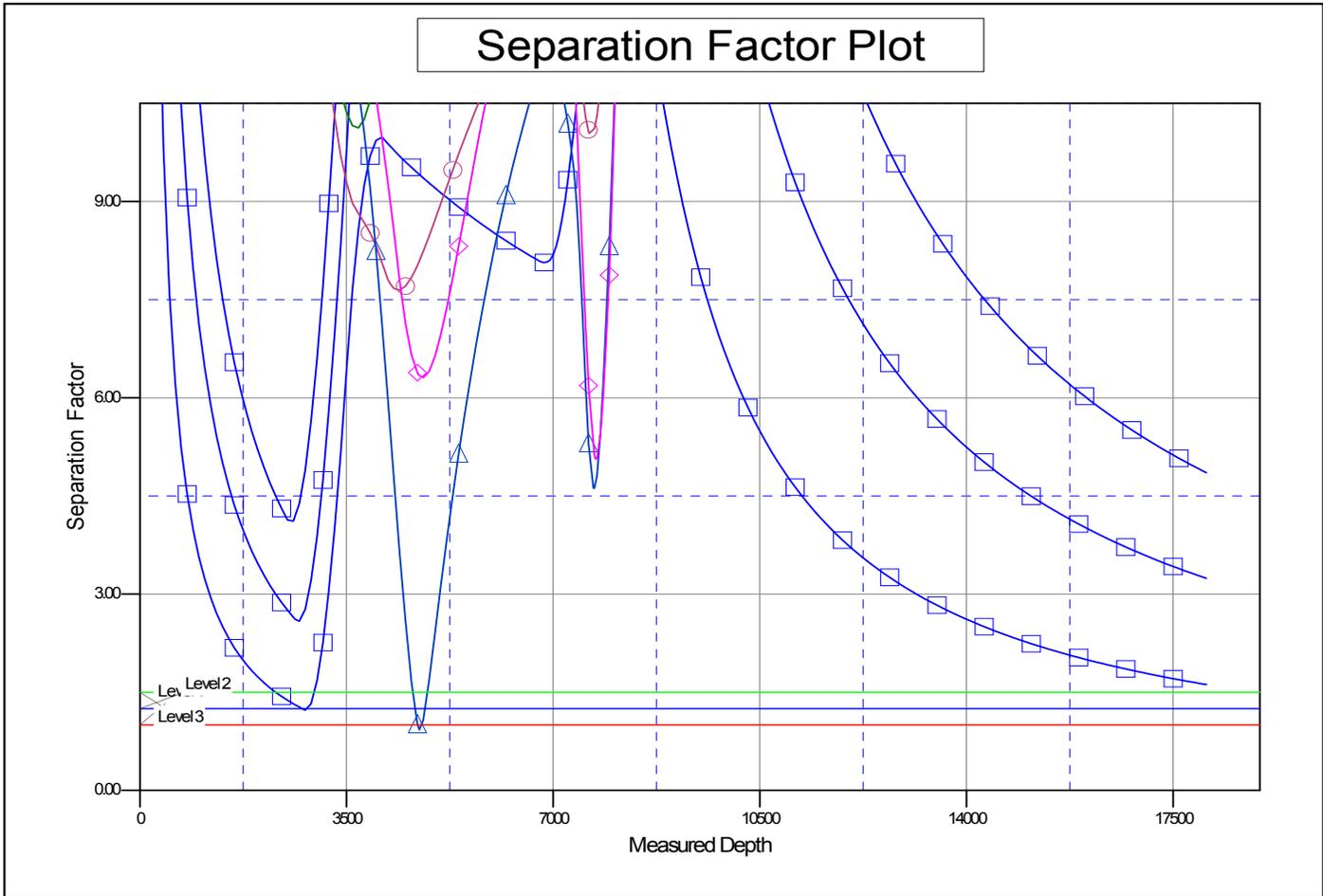
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|--|--|---|
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