

# **SandRidge Energy**

**North Park Basin**

**T7N-R80W-S9**

**Castle 0780 7-17H20**

**Wellbore #1**

**Design #1**

## **Anticollision Summary Report**

**29 August, 2016**

# SandRidge Energy

## Anticollision Summary Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Castle 0780 7-17H20
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	WELL @ 8136.0usft (Original Well Elev)
<b>Reference Site:</b>	T7N-R80W-S9	<b>MD Reference:</b>	WELL @ 8136.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Castle 0780 7-17H20	<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	8/10/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	18,135.5	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-S9						
Castle 0780 5-17H20 - Wellbore #1 - Design #1	2,500.0	2,498.0	30.2	19.3	2.756	CC, ES, SF
Castle 0780 6-17H20 - Wellbore #1 - Design #1	2,633.4	2,633.4	15.1	3.5	1.306	Level 3, CC, ES, SF
Castle 0780 8-17H20 - Wellbore #1 - Design #1	2,800.0	2,798.0	15.1	2.8	1.227	Level 2, CC, ES, SF
Gregory 0780 1-9H - Wellbore #1 - Wellbore #1	0.0	1.0	165.7			
Gregory 0780 1-9H - Wellbore #1 - Wellbore #1	100.0	100.3	165.9	165.7	860.536	ES
Gregory 0780 1-9H - Wellbore #1 - Wellbore #1	3,800.0	3,782.1	336.9	320.3	20.268	SF
Gregory 0780 2-9H - Wellbore #1 - Design #1	2,800.0	2,798.0	170.8	158.5	13.868	CC, ES
Gregory 0780 2-9H - Wellbore #1 - Design #1	3,100.0	3,097.5	180.3	166.7	13.255	SF
Gregory 0780 3-9H - Wellbore #1 - Design #1	2,800.0	2,798.0	181.7	169.4	14.748	CC, ES
Gregory 0780 3-9H - Wellbore #1 - Design #1	3,000.0	2,994.5	186.3	173.2	14.160	SF
Gregory 0780 4-9H - Wellbore #1 - Design #1	2,500.0	2,498.0	193.1	182.1	17.600	CC, ES
Gregory 0780 4-9H - Wellbore #1 - Design #1	2,900.0	2,886.2	205.1	192.4	16.195	SF
Mutual 0780 5-8H - Wellbore #1 - Design #1	3,515.5	3,510.9	133.5	117.5	8.331	CC, ES
Mutual 0780 5-8H - Wellbore #1 - Design #1	3,800.0	3,792.4	139.8	122.0	7.862	SF
Mutual 0780 6-8H - Wellbore #1 - Design #1	4,457.9	4,470.6	37.5	17.8	1.904	Level 4, CC
Mutual 0780 6-8H - Wellbore #1 - Design #1	4,500.0	4,512.4	37.8	17.7	1.876	Level 4, ES, SF
Mutual 0780 7-8H - Wellbore #1 - Design #1	2,800.0	2,798.0	180.2	167.8	14.624	CC
Mutual 0780 7-8H - Wellbore #1 - Design #1	2,900.0	2,898.0	180.4	167.6	14.141	ES
Mutual 0780 7-8H - Wellbore #1 - Design #1	7,500.0	7,556.2	334.7	294.0	8.236	SF
Mutual 0780 8-8H - Wellbore #1 - Design #1	2,800.0	2,798.0	195.1	182.8	15.835	CC
Mutual 0780 8-8H - Wellbore #1 - Design #1	2,900.0	2,898.0	195.3	182.6	15.312	ES
Mutual 0780 8-8H - Wellbore #1 - Design #1	3,300.0	3,295.5	206.2	191.7	14.215	SF

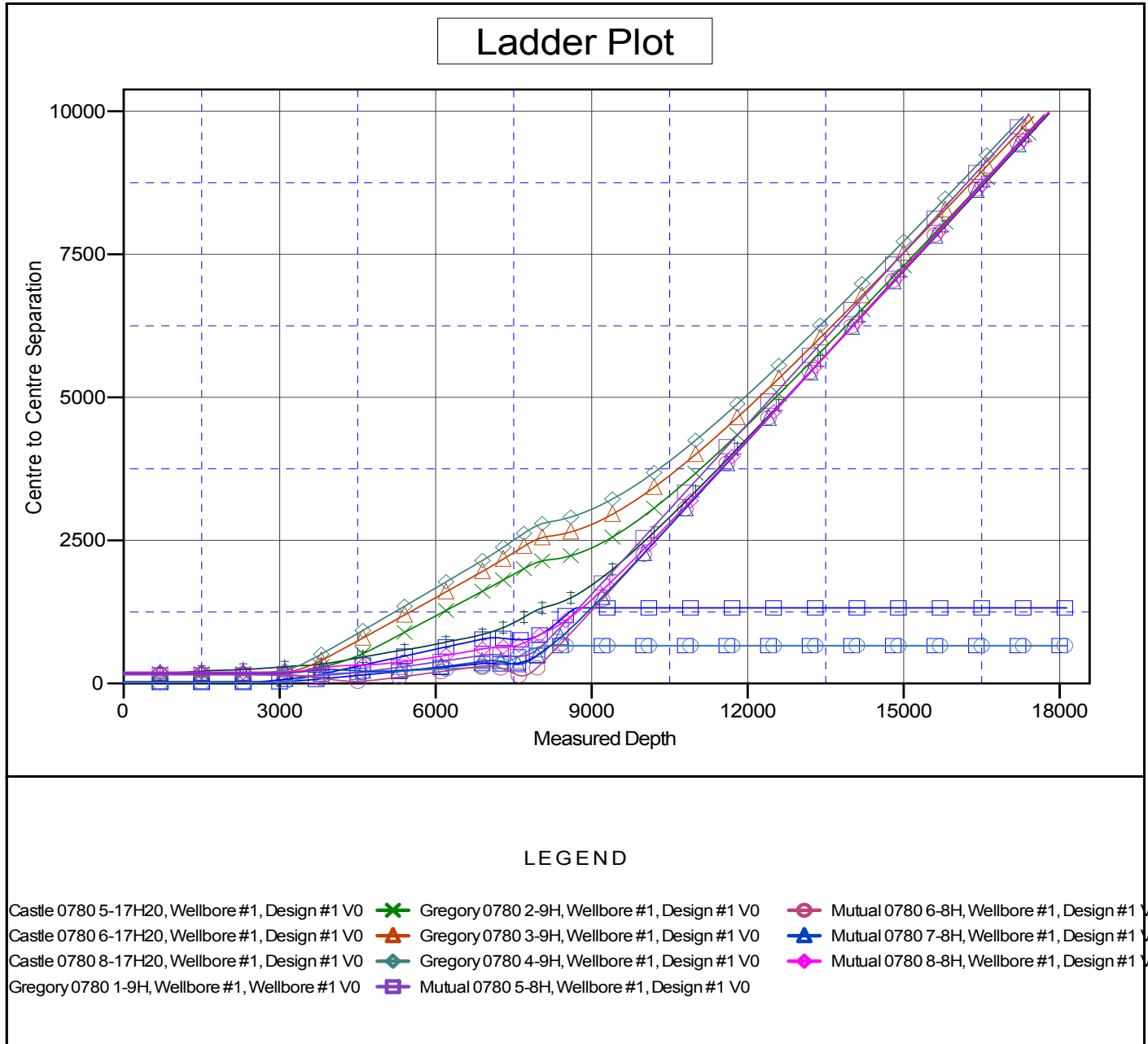
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Reference Depths are relative to WELL @ 8136.0usft (Original Well Ele)  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Castle 0780 7-17H20  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: -0.57°



# SandRidge Energy

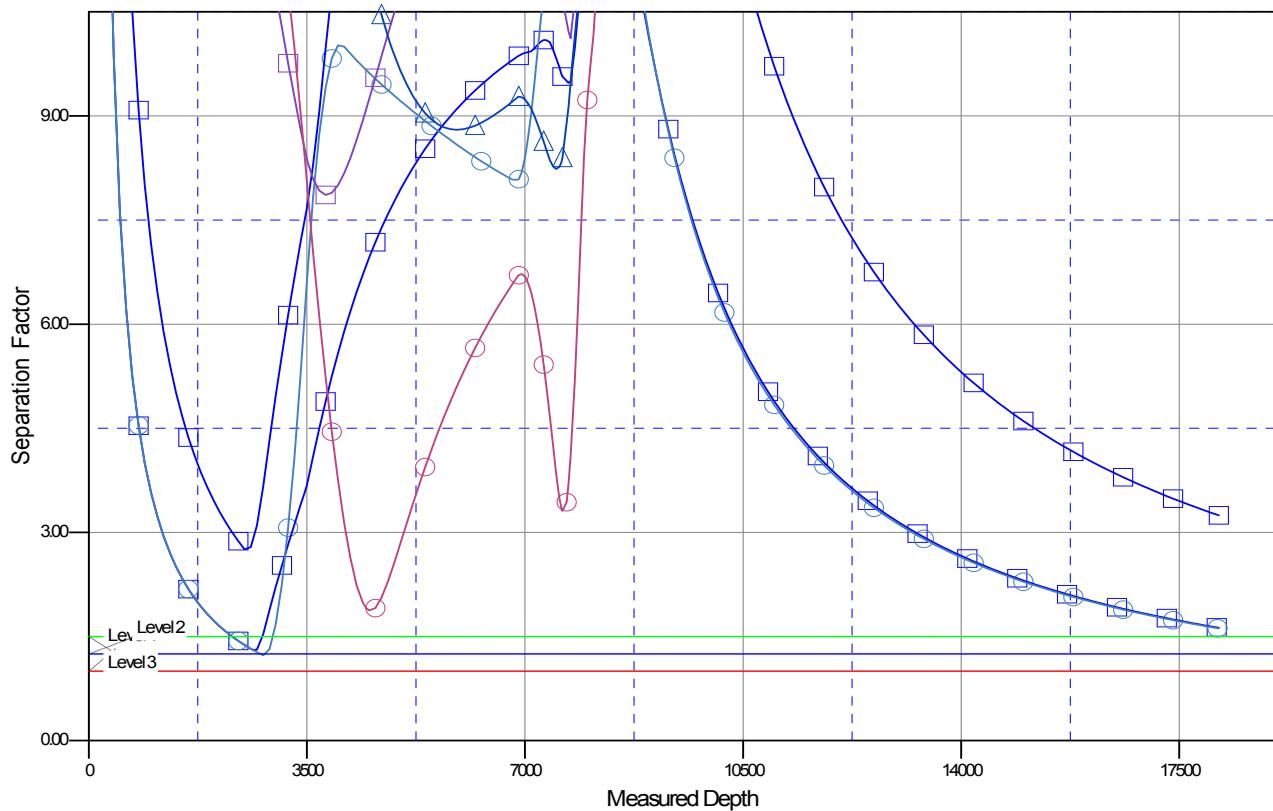
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### Separation Factor Plot



### LEGEND

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