

# **SandRidge Energy**

**North Park Basin**

**T7N-R80W-S16**

**Evans 0780 6-21H**

**Wellbore #1**

**Design #1**

## **Anticollision Summary Report**

**08 July, 2016**

# SandRidge Energy

## Anticollision Summary Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Evans 0780 6-21H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	KB @ 8154.0usft
<b>Reference Site:</b>	T7N-R80W-S16	<b>MD Reference:</b>	KB @ 8154.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Evans 0780 6-21H	<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	7/8/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,296.8	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-S16						
Evans 0780 5-21H - Wellbore #1 - Design #1	7,400.0	7,398.0	15.0	-18.0	0.455	Level 1, CC, ES, SF
Evans 0780 7-21H - Wellbore #1 - Design #1	7,454.3	7,452.5	13.7	-19.5	0.412	Level 1, CC, ES, SF
Evans 0780 8-21H - Wellbore #1 - Design #1	2,600.0	2,598.0	30.0	18.6	2.627	CC
Evans 0780 8-21H - Wellbore #1 - Design #1	2,700.0	2,697.8	30.4	18.5	2.560	ES
Evans 0780 8-21H - Wellbore #1 - Design #1	2,900.0	2,897.7	32.2	19.5	2.532	SF
Ray Ranch 0780 5-16H - Wellbore #1 - Design #1	4,524.0	4,527.0	58.6	38.7	2.942	CC, ES, SF
Ray Ranch 0780 6-16H - Wellbore #1 - Design #1	4,852.2	4,856.0	5.9	-15.4	0.276	Level 1, CC, ES, SF
Ray Ranch 0780 7-16H - Wellbore #1 - Design #1	4,224.7	4,225.6	35.9	17.4	1.937	Level 4, CC, ES, SF
Ray Ranch 0780 8-16H - Wellbore #1 - Design #1	2,913.0	2,912.4	33.9	21.2	2.668	CC, ES, SF
T7N-R80W-S21						
Evans 0780 1-21H - Wellbore #1 - Design #1	14,296.8	13,180.3	1,388.5	1,114.0	5.057	CC, ES, SF
Evans 0780 2-21H - Wellbore #1 - Design #1	9,191.3	7,975.6	1,945.6	1,897.6	40.603	CC
Evans 0780 2-21H - Wellbore #1 - Design #1	14,296.8	13,288.6	2,048.7	1,830.3	9.379	ES, SF
Evans 0780 3-21H - Wellbore #1 - Design #1	4,900.0	4,996.4	2,336.0	2,314.2	106.845	CC, ES
Evans 0780 3-21H - Wellbore #1 - Design #1	14,296.8	13,448.1	2,712.1	2,494.7	12.477	SF
Evans 0780 4-21H - Wellbore #1 - Design #1	4,400.0	4,496.4	2,350.3	2,330.6	119.677	CC, ES
Evans 0780 4-21H - Wellbore #1 - Design #1	14,296.8	13,640.7	3,357.5	3,140.9	15.496	SF
Ray Ranch 0780 1-16H - Wellbore #1 - Design #1	7,975.6	9,721.7	1,471.4	1,419.1	28.147	CC, ES
Ray Ranch 0780 1-16H - Wellbore #1 - Design #1	10,500.0	8,000.0	1,786.6	1,718.7	26.306	SF
Ray Ranch 0780 2-16H - Wellbore #1 - Design #1	7,987.1	9,837.5	2,139.7	2,088.0	41.367	CC, ES
Ray Ranch 0780 2-16H - Wellbore #1 - Design #1	11,200.0	7,900.0	2,601.2	2,520.5	32.227	SF
Ray Ranch 0780 3-16H - Wellbore #1 - Design #1	2,400.0	2,496.0	2,409.1	2,398.4	224.282	CC, ES
Ray Ranch 0780 3-16H - Wellbore #1 - Design #1	11,900.0	7,925.7	3,306.2	3,211.7	34.984	SF
Ray Ranch 0780 4-16H - Wellbore #1 - Design #1	2,400.0	2,496.0	2,420.3	2,409.5	225.320	CC, ES
Ray Ranch 0780 4-16H - Wellbore #1 - Design #1	13,100.0	7,487.0	4,708.6	4,595.1	41.501	SF

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

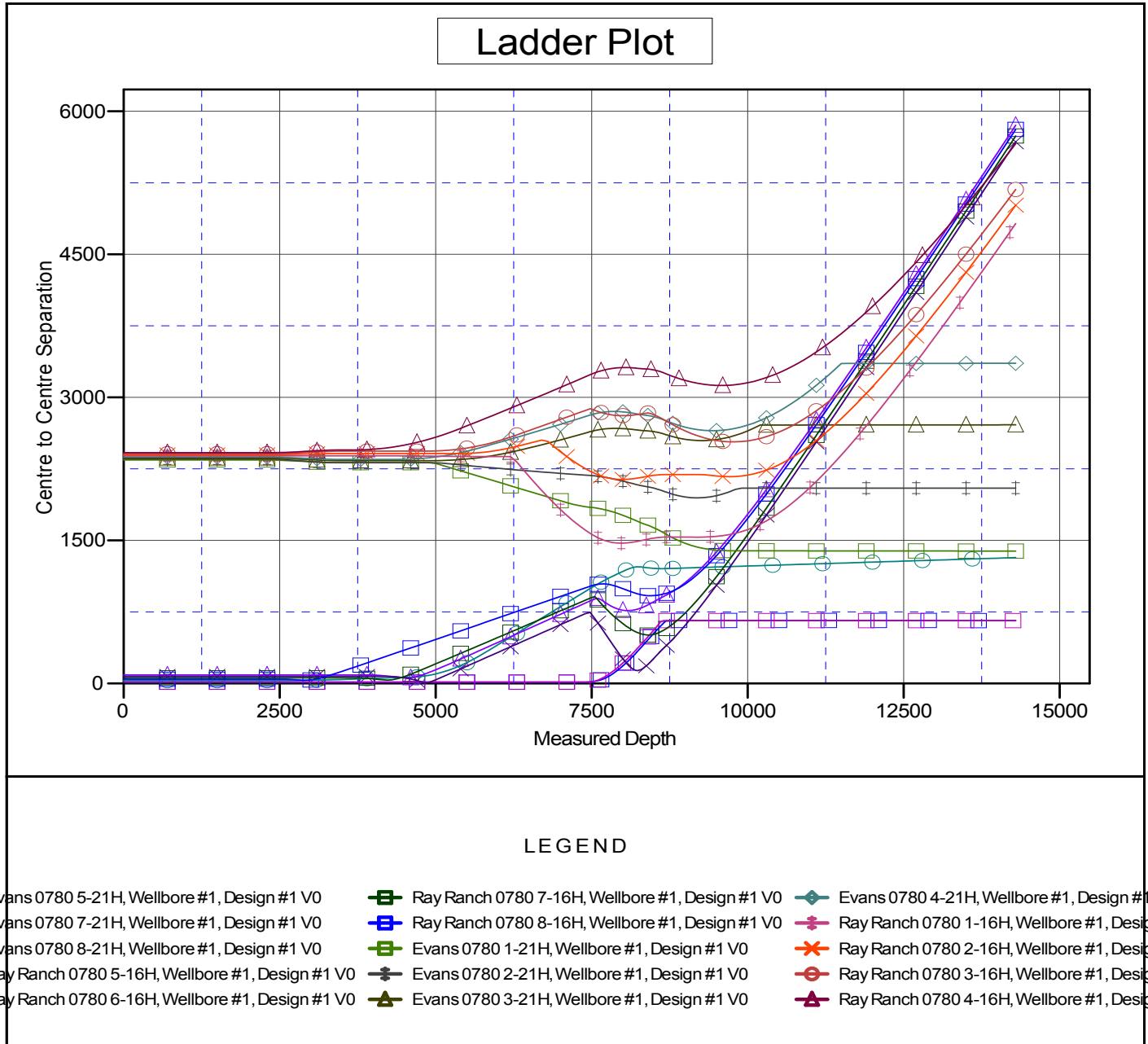
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<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KB @ 8154.0usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Evans 0780 6-21H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: -0.57°



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

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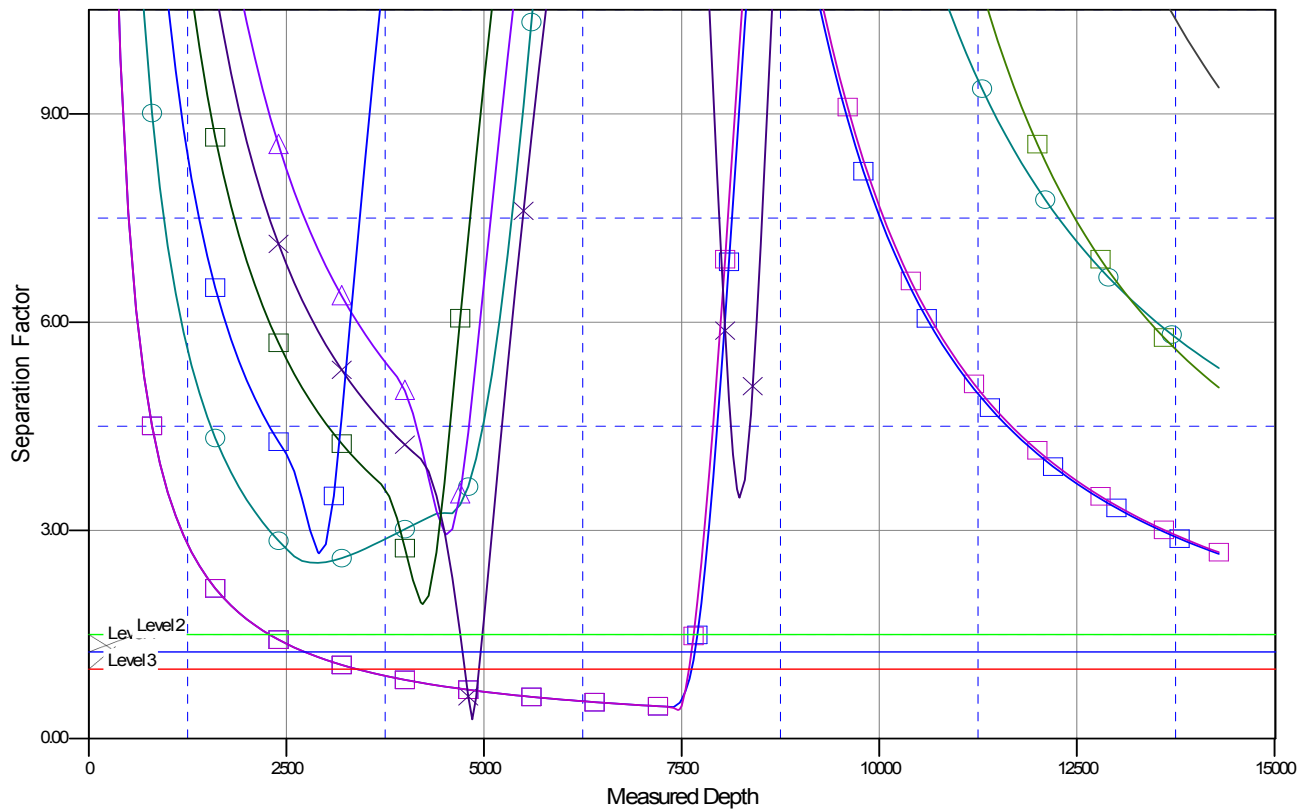
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### Separation Factor Plot



### LEGEND

Evans 0780 5-21H, Wellbore #1, Design #1 V0	Ray Ranch 0780 7-16H, Wellbore #1, Design #1 V0	Evans 0780 4-21H, Wellbore #1, Design #1 V0
Evans 0780 7-21H, Wellbore #1, Design #1 V0	Ray Ranch 0780 8-16H, Wellbore #1, Design #1 V0	Ray Ranch 0780 1-16H, Wellbore #1, Design #1 V0
Evans 0780 8-21H, Wellbore #1, Design #1 V0	Evans 0780 1-21H, Wellbore #1, Design #1 V0	Ray Ranch 0780 2-16H, Wellbore #1, Design #1 V0
Ray Ranch 0780 5-16H, Wellbore #1, Design #1 V0	Evans 0780 2-21H, Wellbore #1, Design #1 V0	Ray Ranch 0780 3-16H, Wellbore #1, Design #1 V0
Ray Ranch 0780 6-16H, Wellbore #1, Design #1 V0	Evans 0780 3-21H, Wellbore #1, Design #1 V0	Ray Ranch 0780 4-16H, Wellbore #1, Design #1 V0