

# **SandRidge Energy**

**North Park Basin**

**T7N-R80W-S18**

**Coalmont 0781 4-13H**

**Wellbore #1**

**Design #1**

## **Anticollision Summary Report**

**15 July, 2016**

# SandRidge Energy

## Anticollision Summary Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Coalmont 0781 4-13H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	WELL @ 8222.0usft (Original Well Elev)
<b>Reference Site:</b>	T7N-R80W-S18	<b>MD Reference:</b>	WELL @ 8222.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Coalmont 0781 4-13H	<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	7/7/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,725.1	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-S18						
Coalmont 0781 1-13H - Wellbore #1 - Design #1	2,600.0	2,600.0	30.1	18.6	2.631	CC, ES, SF
Coalmont 0781 2-13H - Wellbore #1 - Design #1	2,600.0	2,600.0	15.0	3.5	1.310	Level 3, CC, ES, SF
Coalmont 0781 5-13H - Wellbore #1 - Design #1	2,500.0	2,500.0	14.8	3.9	1.352	Level 3, CC, ES, SF
Hebron 01-18H - Wellbore #1 - Wellbore #1	11,725.1	6,432.9	4,471.7	4,380.7	49.158	CC, ES, SF
Hebron 0780 10-18H - Wellbore #1 - Design #1	2,466.1	2,467.7	198.5	187.7	18.329	CC
Hebron 0780 10-18H - Wellbore #1 - Design #1	2,500.0	2,500.0	198.5	187.5	18.082	ES
Hebron 0780 10-18H - Wellbore #1 - Design #1	2,700.0	2,692.5	203.9	192.1	17.268	SF
Hebron 0780 2-18H - Wellbore #1 - Wellbore #1	5,962.1	11,630.0	4,262.4	4,162.5	42.677	CC, ES
Hebron 0780 2-18H - Wellbore #1 - Wellbore #1	6,022.9	11,630.0	4,262.9	4,162.8	42.603	SF
Hebron 0780 6-18H - Wellbore #1 - Design #1	2,600.0	2,601.8	165.7	154.2	14.494	CC, ES
Hebron 0780 6-18H - Wellbore #1 - Design #1	11,725.1	11,331.3	1,979.5	1,794.4	10.692	SF
Hebron 0780 7-18H - Wellbore #1 - Design #1	2,600.0	2,601.8	172.3	160.9	15.072	CC, ES
Hebron 0780 7-18H - Wellbore #1 - Design #1	2,900.0	2,900.0	178.0	165.3	14.016	SF
Hebron 0780 8-18H - Wellbore #1 - Design #1	2,600.0	2,601.8	180.1	168.7	15.759	CC, ES
Hebron 0780 8-18H - Wellbore #1 - Design #1	2,900.0	2,896.5	188.1	175.5	14.844	SF
Hebron 0780 9-18H - Wellbore #1 - Design #1	2,600.0	2,601.8	188.9	177.5	16.524	CC
Hebron 0780 9-18H - Wellbore #1 - Design #1	2,603.7	2,605.5	188.9	177.4	16.501	ES
Hebron 0780 9-18H - Wellbore #1 - Design #1	2,800.0	2,797.1	193.3	181.1	15.776	SF
Hebron 1-18HR - Wellbore #1 - Wellbore #1	11,725.1	6,476.8	4,347.6	4,243.0	41.555	CC, ES, SF
Hebron 5-18H - Wellbore #1 - Wellbore #1	6,050.0	11,360.0	1,742.4	1,660.6	21.285	SF
Hebron 5-18H - Wellbore #1 - Wellbore #1	6,200.0	11,360.0	1,720.8	1,643.0	22.109	ES
Hebron 5-18H - Wellbore #1 - Wellbore #1	6,202.9	11,360.0	1,720.8	1,643.1	22.141	CC

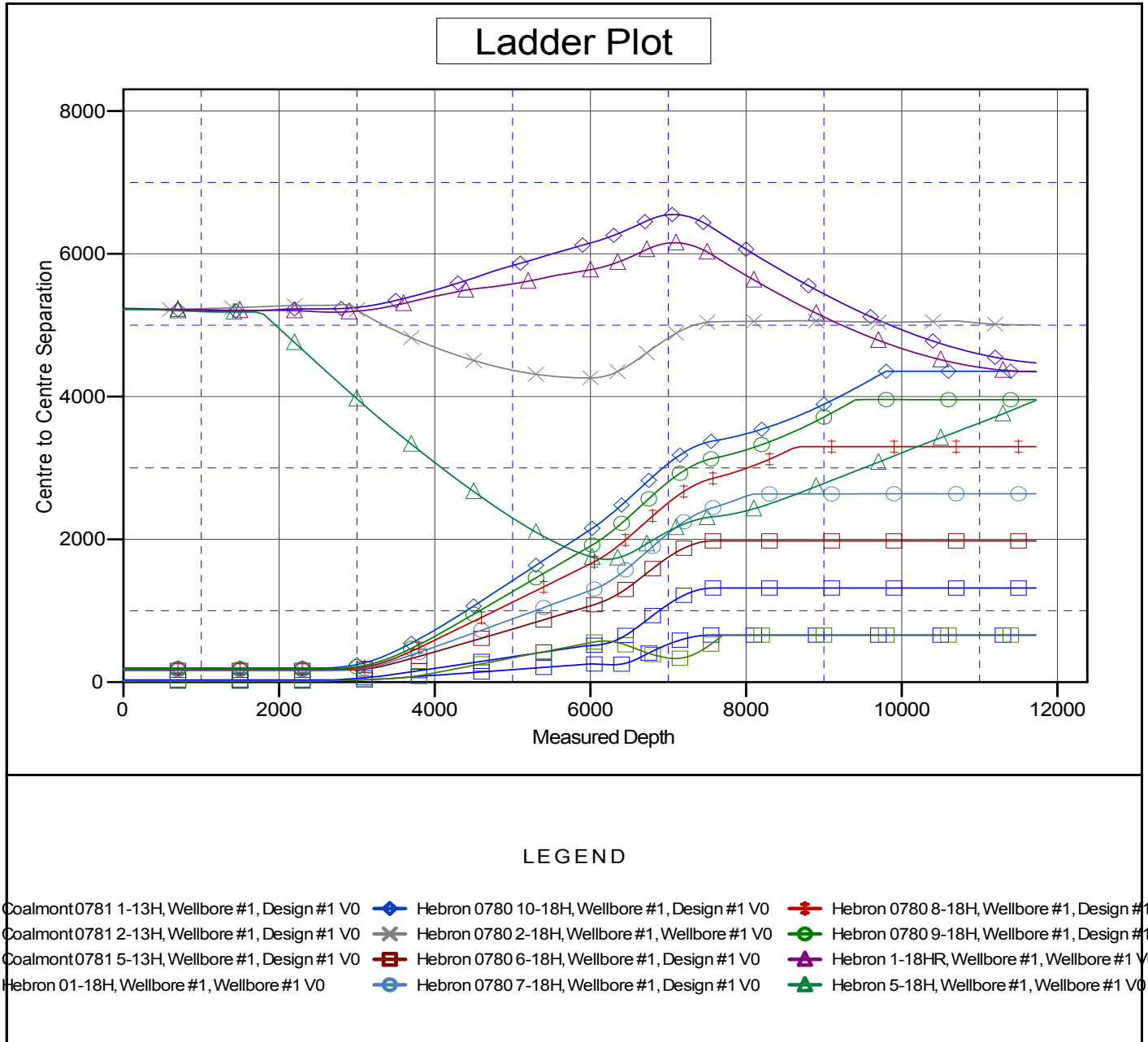
# SandRidge Energy

## Anticollision Summary Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Coalmont 0781 4-13H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	WELL @ 8222.0usft (Original Well Elev)
<b>Reference Site:</b>	T7N-R80W-S18	<b>MD Reference:</b>	WELL @ 8222.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Coalmont 0781 4-13H	<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 Depths are relative to WELL @ 8222.0usft (Original Well Ele)  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Coalmont 0781 4-13H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: -0.60°



# SandRidge Energy

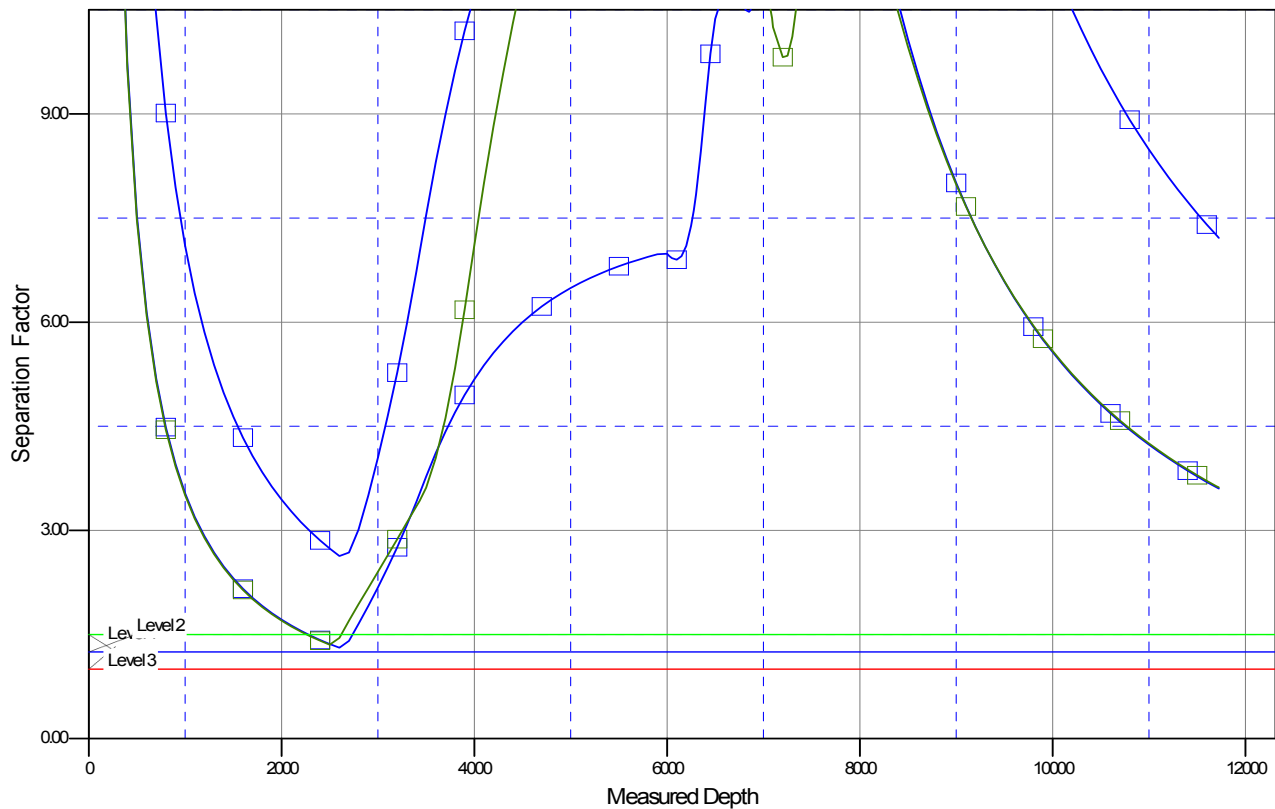
## Anticollision Summary Report

<b>Company:</b>	SandRidge Energy	<b>Local Co-ordinate Reference:</b>	Well Coalmont 0781 4-13H
<b>Project:</b>	North Park Basin	<b>TVD Reference:</b>	WELL @ 8222.0usft (Original Well Elev)
<b>Reference Site:</b>	T7N-R80W-S18	<b>MD Reference:</b>	WELL @ 8222.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Coalmont 0781 4-13H	<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 Depths are relative to WELL @ 8222.0usft (Original Well Ele  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Coalmont 0781 4-13H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: -0.60°

### Separation Factor Plot



### LEGEND

- Coalmont0781 1-13H, Wellbore #1, Design #1 V0
- Coalmont0781 2-13H, Wellbore #1, Design #1 V0
- Coalmont0781 5-13H, Wellbore #1, Design #1 V0
- Hebron 01-18H, Wellbore #1, Wellbore #1 V0
- Hebron 0780 10-18H, Wellbore #1, Design #1 V0
- Hebron 0780 2-18H, Wellbore #1, Wellbore #1 V0
- Hebron 0780 6-18H, Wellbore #1, Design #1 V0
- Hebron 0780 7-18H, Wellbore #1, Design #1 V0
- Hebron 0780 8-18H, Wellbore #1, Design #1 V0
- Hebron 0780 9-18H, Wellbore #1, Design #1 V0
- Hebron 1-18HR, Wellbore #1, Wellbore #1 V0
- Hebron 5-18H, Wellbore #1, Wellbore #1 V0