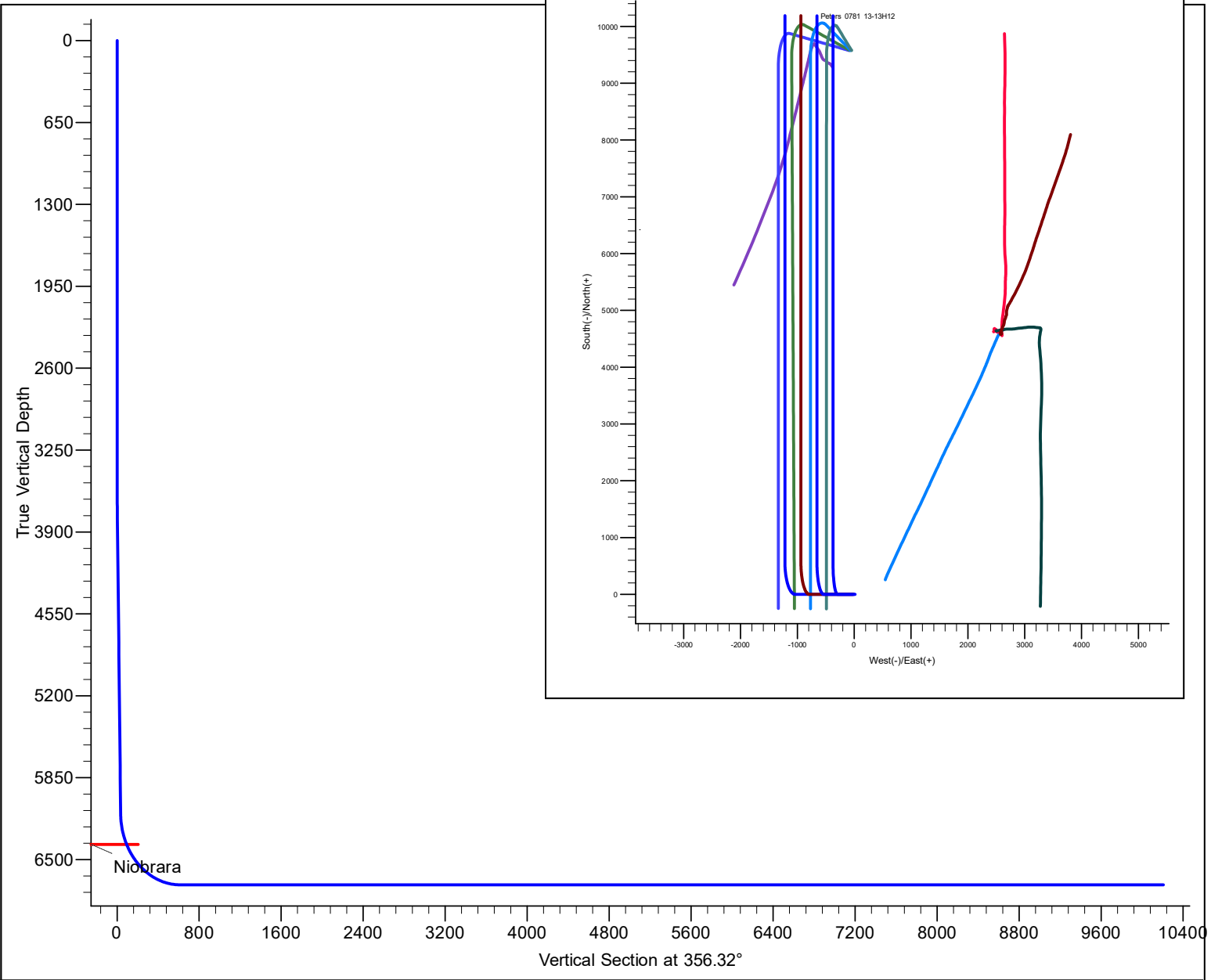


PROJECT DETAILS: North Park Basin					<div><div><div><div><div></div><div>G</div></div><div><div></div><div>T</div></div><div><div></div><div>M</div></div></div><div><div></div><div></div></div></div></div> <div><div>Azimuths to Grid North</div><div>True North: 0.60°</div><div>Magnetic North: 10.50°</div><div>Magnetic Field</div><div>Strength: 53179.3snT</div><div>Dip Angle: 66.96°</div><div>Date: 12/31/2009</div><div>Model: IGRF200510</div></div>	
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone System Datum: Mean Sea Level						
FORMATION TOP DETAILS					CASING DETAILS	
TVDPPath 6380.0MDPath 6448.3Formation NiobraraDipAngle 0.00DipDir					No casing data is available	
DESIGN DETAILS: Design #1					Project: North Park Basin Site: T7N-R80W-S18 Well: Peters 0781 13-13H12 Wellbore: Wellbore #1 Design: Design #1	
0' Vertical Section coordinates						
Type TD	Target	Azimuth 356.32	Origin Slot	Type N/S 0.0	E/W 0.0	From TVD 0.0



SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3400.0	0.00	0.00	3400.0	0.0	0.0	0.00	0.00	0.0		
3	3798.0	11.94	270.00	3795.1	0.0	-41.3	3.00	270.00	2.7		
4	6194.1	11.94	270.00	6139.4	0.0	-537.0	0.00	0.00	34.5		
5	7094.1	90.00	0.00	6700.0	573.0	-655.5	10.00	90.00	613.9	Peters 13 BHL	
6	16708.0	90.00	0.00	6700.0	10186.8	-655.2	0.00	0.00	10207.9	Peters 13 BHL	

SandRidge Energy

North Park Basin

T7N-R80W-S18

Peters 0781 13-13H12

Wellbore #1

Plan: Design #1

Standard Survey Report

17 October, 2017

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 13-13H12
Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Well:	Peters 0781 13-13H12	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Project	North Park Basin		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	T7N-R80W-S18				
Site Position:		Northing:	1,456,963.79 usft	Latitude:	40° 35' 2.980 N
From:	Lat/Long	Easting:	2,745,723.26 usft	Longitude:	106° 24' 55.770 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.59 °

Well	Peters 0781 13-13H12					
Well Position	+N/-S	0.0 usft	Northing:	1,452,362.39 usft	Latitude:	40° 34' 17.247 N
	+E/-W	0.0 usft	Easting:	2,743,129.81 usft	Longitude:	106° 25' 28.760 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,207.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	9.90	66.96	53,179

Design	Design #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	356.32	

Survey Tool Program	Date	10/17/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	16,708.0	Design #1 (Wellbore #1)	Sperry MWD	Fixed:v2:standard declination	

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 13-13H12
Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Well:	Peters 0781 13-13H12	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 3.00									
3,500.0	3.00	270.00	3,500.0	0.0	-2.6	0.2	3.00	3.00	0.00
3,600.0	6.00	270.00	3,599.6	0.0	-10.5	0.7	3.00	3.00	0.00
3,700.0	9.00	270.00	3,698.8	0.0	-23.5	1.5	3.00	3.00	0.00
3,798.0	11.94	270.00	3,795.1	0.0	-41.3	2.7	3.00	3.00	0.00
Start 2396.1 hold at 3798.0 MD									
3,800.0	11.94	270.00	3,797.1	0.0	-41.7	2.7	0.00	0.00	0.00
3,900.0	11.94	270.00	3,894.9	0.0	-62.4	4.0	0.00	0.00	0.00
4,000.0	11.94	270.00	3,992.8	0.0	-83.1	5.3	0.00	0.00	0.00
4,100.0	11.94	270.00	4,090.6	0.0	-103.8	6.7	0.00	0.00	0.00
4,200.0	11.94	270.00	4,188.4	0.0	-124.5	8.0	0.00	0.00	0.00
4,300.0	11.94	270.00	4,286.3	0.0	-145.2	9.3	0.00	0.00	0.00
4,400.0	11.94	270.00	4,384.1	0.0	-165.9	10.6	0.00	0.00	0.00
4,500.0	11.94	270.00	4,481.9	0.0	-186.5	12.0	0.00	0.00	0.00
4,600.0	11.94	270.00	4,579.8	0.0	-207.2	13.3	0.00	0.00	0.00
4,700.0	11.94	270.00	4,677.6	0.0	-227.9	14.6	0.00	0.00	0.00
4,800.0	11.94	270.00	4,775.5	0.0	-248.6	16.0	0.00	0.00	0.00
4,900.0	11.94	270.00	4,873.3	0.0	-269.3	17.3	0.00	0.00	0.00
5,000.0	11.94	270.00	4,971.1	0.0	-290.0	18.6	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 13-13H12
Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Well:	Peters 0781 13-13H12	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	11.94	270.00	5,069.0	0.0	-310.7	19.9	0.00	0.00	0.00
5,200.0	11.94	270.00	5,166.8	0.0	-331.4	21.3	0.00	0.00	0.00
5,300.0	11.94	270.00	5,264.6	0.0	-352.0	22.6	0.00	0.00	0.00
5,400.0	11.94	270.00	5,362.5	0.0	-372.7	23.9	0.00	0.00	0.00
5,500.0	11.94	270.00	5,460.3	0.0	-393.4	25.3	0.00	0.00	0.00
5,600.0	11.94	270.00	5,558.1	0.0	-414.1	26.6	0.00	0.00	0.00
5,700.0	11.94	270.00	5,656.0	0.0	-434.8	27.9	0.00	0.00	0.00
5,800.0	11.94	270.00	5,753.8	0.0	-455.5	29.2	0.00	0.00	0.00
5,900.0	11.94	270.00	5,851.7	0.0	-476.2	30.6	0.00	0.00	0.00
6,000.0	11.94	270.00	5,949.5	0.0	-496.8	31.9	0.00	0.00	0.00
6,100.0	11.94	270.00	6,047.3	0.0	-517.5	33.2	0.00	0.00	0.00
6,194.1	11.94	270.00	6,139.4	0.0	-537.0	34.5	0.00	0.00	0.00
Start DLS 10.00 TFO 90.00									
6,200.0	11.95	272.85	6,145.2	0.0	-538.2	34.6	10.00	0.24	48.30
6,300.0	15.91	312.11	6,242.4	9.8	-558.8	45.6	10.00	3.95	39.26
6,400.0	23.67	331.16	6,336.5	36.6	-578.7	73.7	10.00	7.76	19.05
6,448.3	27.91	336.48	6,380.0	55.5	-587.9	93.1	10.00	8.79	11.01
Niobrara									
6,500.0	32.62	340.71	6,424.7	79.7	-597.3	117.9	10.00	9.11	8.19
6,600.0	42.02	346.43	6,504.1	137.9	-614.1	177.0	10.00	9.39	5.71
6,700.0	51.60	350.35	6,572.5	209.2	-628.6	249.1	10.00	9.59	3.93
6,800.0	61.29	353.35	6,627.7	291.6	-640.2	332.1	10.00	9.69	3.00
6,900.0	71.03	355.83	6,668.1	382.5	-648.8	423.4	10.00	9.74	2.48
7,000.0	80.79	358.04	6,692.4	479.3	-653.9	520.3	10.00	9.77	2.21
7,094.1	90.00	0.00	6,700.0	573.0	-655.5	613.9	10.00	9.78	2.09
Start 9613.9 hold at 7094.1 MD									
7,100.0	90.00	0.00	6,700.0	578.9	-655.5	619.7	0.00	0.00	0.00
7,200.0	90.00	0.00	6,700.0	678.9	-655.5	719.5	0.00	0.00	0.00
7,300.0	90.00	0.00	6,700.0	778.9	-655.5	819.3	0.00	0.00	0.00
7,400.0	90.00	0.00	6,700.0	878.9	-655.5	919.1	0.00	0.00	0.00
7,500.0	90.00	0.00	6,700.0	978.9	-655.5	1,018.9	0.00	0.00	0.00
7,600.0	90.00	0.00	6,700.0	1,078.9	-655.5	1,118.7	0.00	0.00	0.00
7,700.0	90.00	0.00	6,700.0	1,178.9	-655.5	1,218.5	0.00	0.00	0.00
7,800.0	90.00	0.00	6,700.0	1,278.9	-655.5	1,318.3	0.00	0.00	0.00
7,900.0	90.00	0.00	6,700.0	1,378.9	-655.5	1,418.1	0.00	0.00	0.00
8,000.0	90.00	0.00	6,700.0	1,478.9	-655.5	1,517.9	0.00	0.00	0.00
8,100.0	90.00	0.00	6,700.0	1,578.9	-655.5	1,617.7	0.00	0.00	0.00
8,200.0	90.00	0.00	6,700.0	1,678.9	-655.5	1,717.5	0.00	0.00	0.00
8,300.0	90.00	0.00	6,700.0	1,778.9	-655.5	1,817.3	0.00	0.00	0.00
8,400.0	90.00	0.00	6,700.0	1,878.9	-655.5	1,917.1	0.00	0.00	0.00
8,500.0	90.00	0.00	6,700.0	1,978.9	-655.5	2,016.8	0.00	0.00	0.00
8,600.0	90.00	0.00	6,700.0	2,078.9	-655.5	2,116.6	0.00	0.00	0.00
8,700.0	90.00	0.00	6,700.0	2,178.9	-655.5	2,216.4	0.00	0.00	0.00
8,800.0	90.00	0.00	6,700.0	2,278.9	-655.5	2,316.2	0.00	0.00	0.00

SandRidge Energy

Survey Report

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Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Well:	Peters 0781 13-13H12	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,900.0	90.00	0.00	6,700.0	2,378.9	-655.5	2,416.0	0.00	0.00	0.00
9,000.0	90.00	0.00	6,700.0	2,478.9	-655.5	2,515.8	0.00	0.00	0.00
9,100.0	90.00	0.00	6,700.0	2,578.9	-655.5	2,615.6	0.00	0.00	0.00
9,200.0	90.00	0.00	6,700.0	2,678.9	-655.5	2,715.4	0.00	0.00	0.00
9,300.0	90.00	0.00	6,700.0	2,778.9	-655.5	2,815.2	0.00	0.00	0.00
9,400.0	90.00	0.00	6,700.0	2,878.9	-655.4	2,915.0	0.00	0.00	0.00
9,500.0	90.00	0.00	6,700.0	2,978.9	-655.4	3,014.8	0.00	0.00	0.00
9,600.0	90.00	0.00	6,700.0	3,078.9	-655.4	3,114.6	0.00	0.00	0.00
9,700.0	90.00	0.00	6,700.0	3,178.9	-655.4	3,214.4	0.00	0.00	0.00
9,800.0	90.00	0.00	6,700.0	3,278.9	-655.4	3,314.2	0.00	0.00	0.00
9,900.0	90.00	0.00	6,700.0	3,378.9	-655.4	3,414.0	0.00	0.00	0.00
10,000.0	90.00	0.00	6,700.0	3,478.9	-655.4	3,513.8	0.00	0.00	0.00
10,100.0	90.00	0.00	6,700.0	3,578.9	-655.4	3,613.5	0.00	0.00	0.00
10,200.0	90.00	0.00	6,700.0	3,678.9	-655.4	3,713.3	0.00	0.00	0.00
10,300.0	90.00	0.00	6,700.0	3,778.9	-655.4	3,813.1	0.00	0.00	0.00
10,400.0	90.00	0.00	6,700.0	3,878.9	-655.4	3,912.9	0.00	0.00	0.00
10,500.0	90.00	0.00	6,700.0	3,978.9	-655.4	4,012.7	0.00	0.00	0.00
10,600.0	90.00	0.00	6,700.0	4,078.9	-655.4	4,112.5	0.00	0.00	0.00
10,700.0	90.00	0.00	6,700.0	4,178.9	-655.4	4,212.3	0.00	0.00	0.00
10,800.0	90.00	0.00	6,700.0	4,278.9	-655.4	4,312.1	0.00	0.00	0.00
10,900.0	90.00	0.00	6,700.0	4,378.9	-655.4	4,411.9	0.00	0.00	0.00
11,000.0	90.00	0.00	6,700.0	4,478.9	-655.4	4,511.7	0.00	0.00	0.00
11,100.0	90.00	0.00	6,700.0	4,578.9	-655.4	4,611.5	0.00	0.00	0.00
11,200.0	90.00	0.00	6,700.0	4,678.9	-655.4	4,711.3	0.00	0.00	0.00
11,300.0	90.00	0.00	6,700.0	4,778.9	-655.4	4,811.1	0.00	0.00	0.00
11,400.0	90.00	0.00	6,700.0	4,878.9	-655.4	4,910.9	0.00	0.00	0.00
11,500.0	90.00	0.00	6,700.0	4,978.9	-655.4	5,010.7	0.00	0.00	0.00
11,600.0	90.00	0.00	6,700.0	5,078.9	-655.4	5,110.4	0.00	0.00	0.00
11,700.0	90.00	0.00	6,700.0	5,178.9	-655.4	5,210.2	0.00	0.00	0.00
11,800.0	90.00	0.00	6,700.0	5,278.9	-655.4	5,310.0	0.00	0.00	0.00
11,900.0	90.00	0.00	6,700.0	5,378.9	-655.4	5,409.8	0.00	0.00	0.00
12,000.0	90.00	0.00	6,700.0	5,478.9	-655.4	5,509.6	0.00	0.00	0.00
12,100.0	90.00	0.00	6,700.0	5,578.9	-655.4	5,609.4	0.00	0.00	0.00
12,200.0	90.00	0.00	6,700.0	5,678.9	-655.4	5,709.2	0.00	0.00	0.00
12,300.0	90.00	0.00	6,700.0	5,778.9	-655.4	5,809.0	0.00	0.00	0.00
12,400.0	90.00	0.00	6,700.0	5,878.9	-655.4	5,908.8	0.00	0.00	0.00
12,500.0	90.00	0.00	6,700.0	5,978.9	-655.4	6,008.6	0.00	0.00	0.00
12,600.0	90.00	0.00	6,700.0	6,078.9	-655.4	6,108.4	0.00	0.00	0.00
12,700.0	90.00	0.00	6,700.0	6,178.9	-655.4	6,208.2	0.00	0.00	0.00
12,800.0	90.00	0.00	6,700.0	6,278.9	-655.4	6,308.0	0.00	0.00	0.00
12,900.0	90.00	0.00	6,700.0	6,378.9	-655.4	6,407.8	0.00	0.00	0.00
13,000.0	90.00	0.00	6,700.0	6,478.9	-655.4	6,507.6	0.00	0.00	0.00
13,100.0	90.00	0.00	6,700.0	6,578.9	-655.3	6,607.4	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 13-13H12
Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Well:	Peters 0781 13-13H12	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,200.0	90.00	0.00	6,700.0	6,678.9	-655.3	6,707.1	0.00	0.00	0.00
13,300.0	90.00	0.00	6,700.0	6,778.9	-655.3	6,806.9	0.00	0.00	0.00
13,400.0	90.00	0.00	6,700.0	6,878.9	-655.3	6,906.7	0.00	0.00	0.00
13,500.0	90.00	0.00	6,700.0	6,978.9	-655.3	7,006.5	0.00	0.00	0.00
13,600.0	90.00	0.00	6,700.0	7,078.9	-655.3	7,106.3	0.00	0.00	0.00
13,700.0	90.00	0.00	6,700.0	7,178.9	-655.3	7,206.1	0.00	0.00	0.00
13,800.0	90.00	0.00	6,700.0	7,278.9	-655.3	7,305.9	0.00	0.00	0.00
13,900.0	90.00	0.00	6,700.0	7,378.9	-655.3	7,405.7	0.00	0.00	0.00
14,000.0	90.00	0.00	6,700.0	7,478.9	-655.3	7,505.5	0.00	0.00	0.00
14,100.0	90.00	0.00	6,700.0	7,578.9	-655.3	7,605.3	0.00	0.00	0.00
14,200.0	90.00	0.00	6,700.0	7,678.9	-655.3	7,705.1	0.00	0.00	0.00
14,300.0	90.00	0.00	6,700.0	7,778.9	-655.3	7,804.9	0.00	0.00	0.00
14,400.0	90.00	0.00	6,700.0	7,878.9	-655.3	7,904.7	0.00	0.00	0.00
14,500.0	90.00	0.00	6,700.0	7,978.9	-655.3	8,004.5	0.00	0.00	0.00
14,600.0	90.00	0.00	6,700.0	8,078.9	-655.3	8,104.3	0.00	0.00	0.00
14,700.0	90.00	0.00	6,700.0	8,178.9	-655.3	8,204.0	0.00	0.00	0.00
14,800.0	90.00	0.00	6,700.0	8,278.9	-655.3	8,303.8	0.00	0.00	0.00
14,900.0	90.00	0.00	6,700.0	8,378.9	-655.3	8,403.6	0.00	0.00	0.00
15,000.0	90.00	0.00	6,700.0	8,478.9	-655.3	8,503.4	0.00	0.00	0.00
15,100.0	90.00	0.00	6,700.0	8,578.9	-655.3	8,603.2	0.00	0.00	0.00
15,200.0	90.00	0.00	6,700.0	8,678.9	-655.3	8,703.0	0.00	0.00	0.00
15,300.0	90.00	0.00	6,700.0	8,778.9	-655.3	8,802.8	0.00	0.00	0.00
15,400.0	90.00	0.00	6,700.0	8,878.9	-655.3	8,902.6	0.00	0.00	0.00
15,500.0	90.00	0.00	6,700.0	8,978.9	-655.3	9,002.4	0.00	0.00	0.00
15,600.0	90.00	0.00	6,700.0	9,078.9	-655.3	9,102.2	0.00	0.00	0.00
15,700.0	90.00	0.00	6,700.0	9,178.9	-655.3	9,202.0	0.00	0.00	0.00
15,800.0	90.00	0.00	6,700.0	9,278.9	-655.3	9,301.8	0.00	0.00	0.00
15,900.0	90.00	0.00	6,700.0	9,378.9	-655.3	9,401.6	0.00	0.00	0.00
16,000.0	90.00	0.00	6,700.0	9,478.9	-655.3	9,501.4	0.00	0.00	0.00
16,100.0	90.00	0.00	6,700.0	9,578.9	-655.3	9,601.2	0.00	0.00	0.00
16,200.0	90.00	0.00	6,700.0	9,678.9	-655.3	9,701.0	0.00	0.00	0.00
16,300.0	90.00	0.00	6,700.0	9,778.9	-655.3	9,800.7	0.00	0.00	0.00
16,400.0	90.00	0.00	6,700.0	9,878.9	-655.3	9,900.5	0.00	0.00	0.00
16,500.0	90.00	0.00	6,700.0	9,978.9	-655.3	10,000.3	0.00	0.00	0.00
16,600.0	90.00	0.00	6,700.0	10,078.9	-655.3	10,100.1	0.00	0.00	0.00
16,700.0	90.00	0.00	6,700.0	10,178.9	-655.3	10,199.9	0.00	0.00	0.00
16,708.0	90.00	0.00	6,700.0	10,186.8	-655.2	10,207.9	0.00	0.00	0.00

TD at 16708.0

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 13-13H12
Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Well:	Peters 0781 13-13H12	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Peters 13 BHL	0.00	360.00	6,700.0	10,186.8	-655.2	1,462,549.21	2,742,474.56	40° 35' 57.836 N	106° 25' 38.632 W
- plan hits target center									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
6,448.3	6,380.0	Niobrara		0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	Comment	
3400	3400	0	0	Start Build 3.00	
3798	3795	0	-41	Start 2396.1 hold at 3798.0 MD	
6194	6139	0	-537	Start DLS 10.00 TFO 90.00	
7094	6700	573	-656	Start 9613.9 hold at 7094.1 MD	
16,708	6700	10,187	-655	TD at 16708.0	

Checked By: _____ Approved By: _____ Date: _____

SandRidge Energy

North Park Basin

T7N-R80W-S18

Peters 0781 13-13H12

Wellbore #1

Design #1

Anticollision Summary Report

17 October, 2017

SandRidge Energy

Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 13-13H12
Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Peters 0781 13-13H12	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	10/17/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	16,708.0	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
T7N-R80W-S18						
Hebron 01-18H - Wellbore #1 - Wellbore #1	11,594.5	6,466.0	3,363.5	3,264.8	34.074	CC
Hebron 01-18H - Wellbore #1 - Wellbore #1	11,700.0	6,481.6	3,365.0	3,264.2	33.398	ES
Hebron 01-18H - Wellbore #1 - Wellbore #1	16,708.0	9,944.0	4,931.5	4,734.5	25.032	SF
Hebron 0780 2-18H - Wellbore #1 - Wellbore #1	10,987.1	6,857.2	3,914.8	3,812.1	38.109	CC
Hebron 0780 2-18H - Wellbore #1 - Wellbore #1	11,100.0	6,824.0	3,916.2	3,811.4	37.388	ES
Hebron 0780 2-18H - Wellbore #1 - Wellbore #1	14,000.0	5,872.7	4,822.3	4,667.2	31.109	SF
Hebron 1-18HR - Wellbore #1 - Wellbore #1	11,285.8	6,572.0	3,257.2	3,150.4	30.478	CC
Hebron 1-18HR - Wellbore #1 - Wellbore #1	16,500.0	11,809.0	3,300.9	3,012.0	11.427	ES
Hebron 1-18HR - Wellbore #1 - Wellbore #1	16,708.0	11,809.0	3,314.1	3,021.2	11.316	SF
Hebron 5-18H - Wellbore #1 - Wellbore #1	6,796.9	11,360.0	1,226.4	1,130.3	12.771	CC
Hebron 5-18H - Wellbore #1 - Wellbore #1	6,800.0	11,360.0	1,226.4	1,130.3	12.770	ES
Hebron 5-18H - Wellbore #1 - Wellbore #1	6,900.0	11,360.0	1,231.2	1,134.7	12.755	SF
Peters 0781 11-13H12 - Wellbore #1 - Design #1	3,000.0	3,000.0	14.9	1.7	1.126	Level 2, CC
Peters 0781 11-13H12 - Wellbore #1 - Design #1	16,708.0	16,759.3	281.9	-112.5	0.715	Level 1, ES, SF
Peters 0781 15-13H12 - Wellbore #1 - Design #1	3,400.0	3,400.0	15.1	0.0	1.003	Level 2, CC
Peters 0781 15-13H12 - Wellbore #1 - Design #1	16,708.0	16,667.3	281.9	-112.2	0.715	Level 1, ES, SF
Peters 0781 9-13H12 - Wellbore #1 - Design #1	2,800.0	2,800.0	30.0	17.7	2.436	CC, ES
Peters 0781 9-13H12 - Wellbore #1 - Design #1	16,708.0	16,827.0	563.8	169.2	1.429	Level 3, SF
T7N-R81W-S12						
Hebron 3-12H - Wellbore #1 - Wellbore #1	15,000.0	7,269.3	455.5	299.3	2.916	SF
Hebron 3-12H - Wellbore #1 - Wellbore #1	15,200.0	7,087.1	442.4	295.5	3.013	ES
Hebron 3-12H - Wellbore #1 - Wellbore #1	15,285.5	7,016.9	440.3	297.7	3.088	CC
Peters 0781 10-12H13 - Wellbore #1 - Design #1	16,380.6	6,631.0	572.0	372.2	2.863	CC, ES, SF
Peters 0781 12-12H13 - Wellbore #1 - Design #1	16,500.0	6,705.1	351.7	149.0	1.735	Level 4, ES, SF
Peters 0781 12-12H13 - Wellbore #1 - Design #1	16,511.7	6,700.5	351.5	149.2	1.738	Level 4, CC
Peters 0781 14-12H13 - Wellbore #1 - Design #1	16,483.5	6,811.3	25.2	-173.9	0.127	Level 1, CC, ES, SF
Peters 0781 16-12H13 - Wellbore #1 - Design #1	16,381.5	6,839.8	219.8	18.1	1.090	Level 2, CC
Peters 0781 16-12H13 - Wellbore #1 - Design #1	16,400.0	6,827.3	220.2	16.6	1.081	Level 2, ES, SF

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

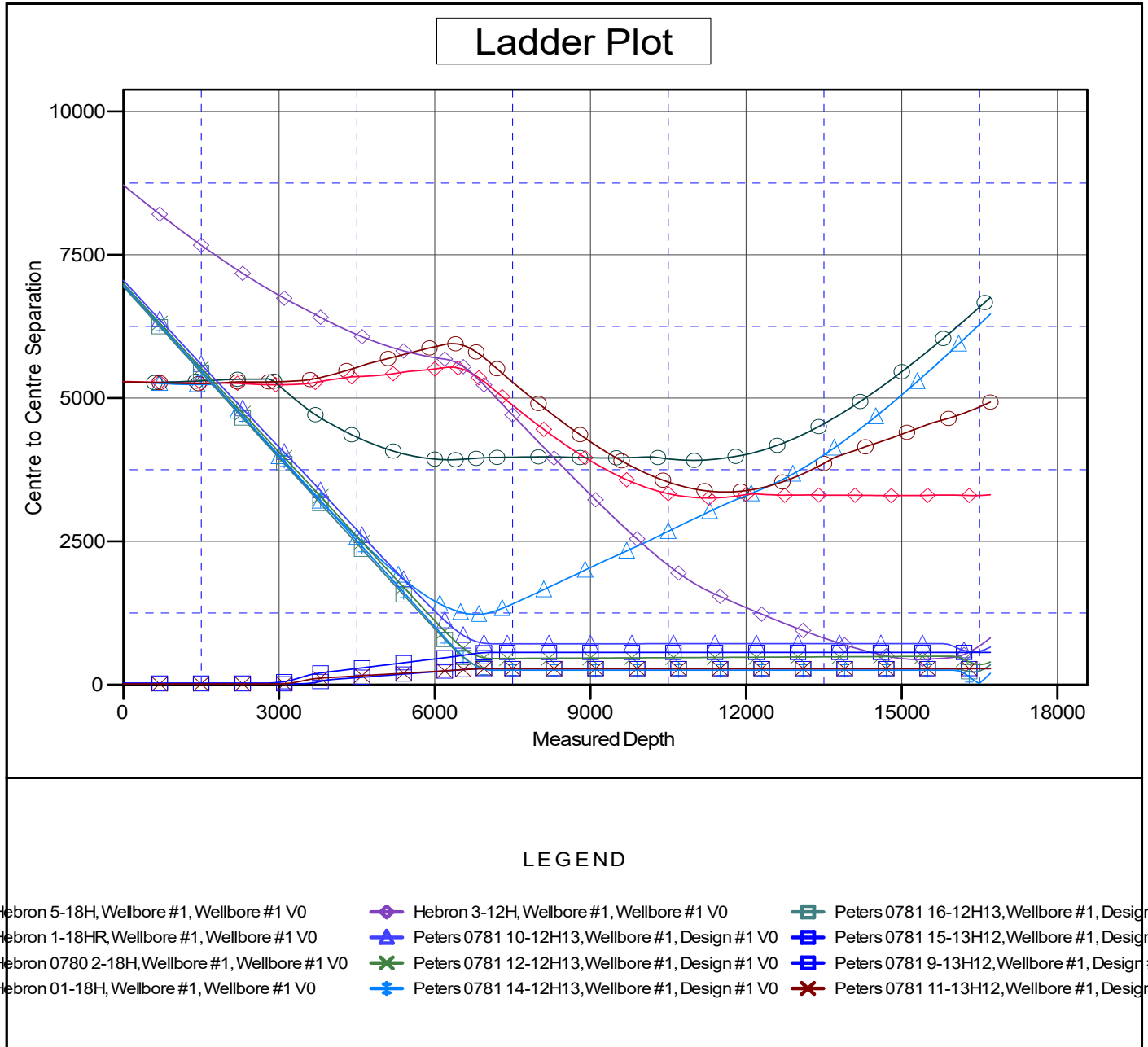
SandRidge Energy

Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 13-13H12
Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Peters 0781 13-13H12	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 Depths are relative to WELL @ 8233.0usft (Original Well Ele)
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Peters 0781 13-13H12
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.60°



SandRidge Energy

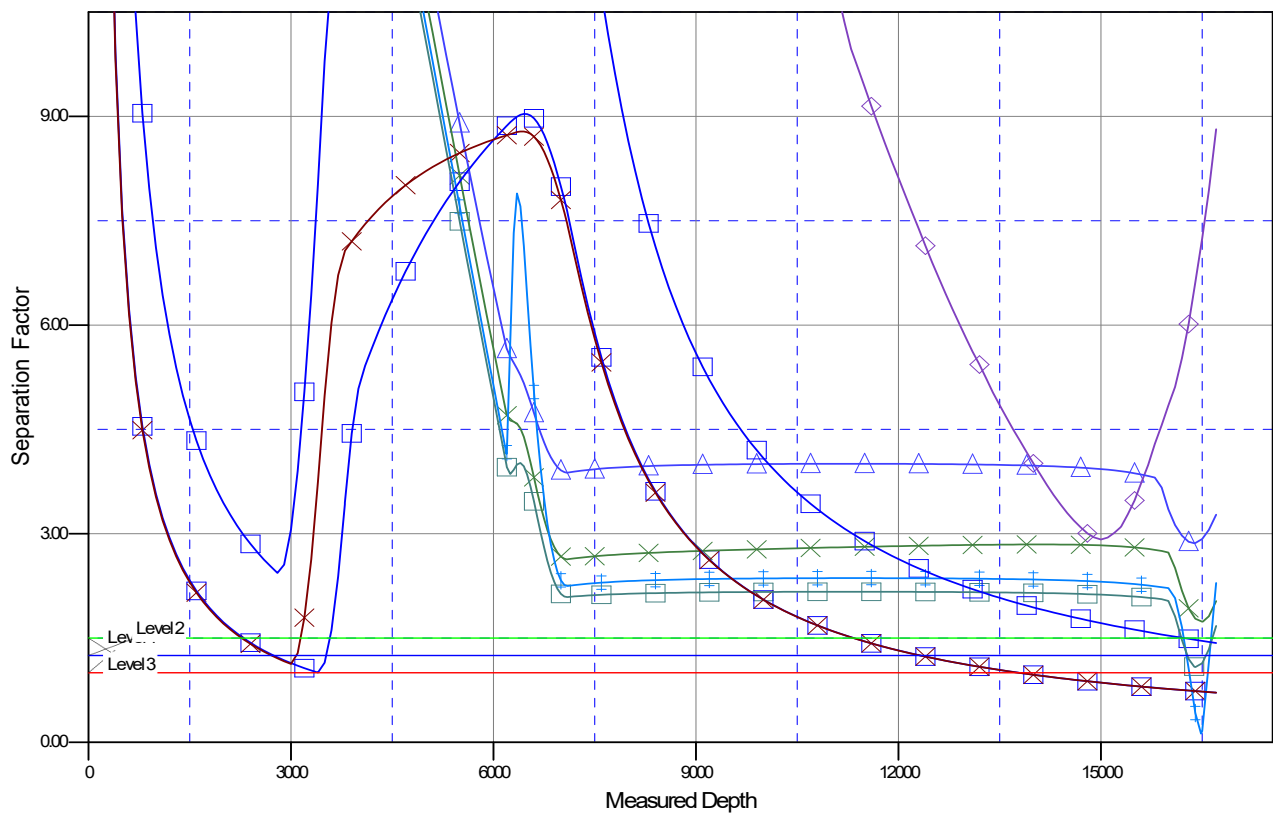
Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 13-13H12
Project:	North Park Basin	TVD Reference:	WELL @ 8233.0usft (Original Well Elev)
Reference Site:	T7N-R80W-S18	MD Reference:	WELL @ 8233.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Peters 0781 13-13H12	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 Depths are relative to WELL @ 8233.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Peters 0781 13-13H12
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.60°

Separation Factor Plot



LEGEND

Hebron 5-18H, Wellbore #1, Wellbore #1 V0	◆ Hebron 3-12H, Wellbore #1, Wellbore #1 V0	▣ Peters 0781 16-12H13, Wellbore #1, Design :
Hebron 1-18HR, Wellbore #1, Wellbore #1 V0	▲ Peters 0781 10-12H13, Wellbore #1, Design #1 V0	▣ Peters 0781 15-13H12, Wellbore #1, Design :
Hebron 0780 2-18H, Wellbore #1, Wellbore #1 V0	✕ Peters 0781 12-12H13, Wellbore #1, Design #1 V0	▣ Peters 0781 9-13H12, Wellbore #1, Design #
Hebron 01-18H, Wellbore #1, Wellbore #1 V0	◆ Peters 0781 14-12H13, Wellbore #1, Design #1 V0	✕ Peters 0781 11-13H12, Wellbore #1, Design :