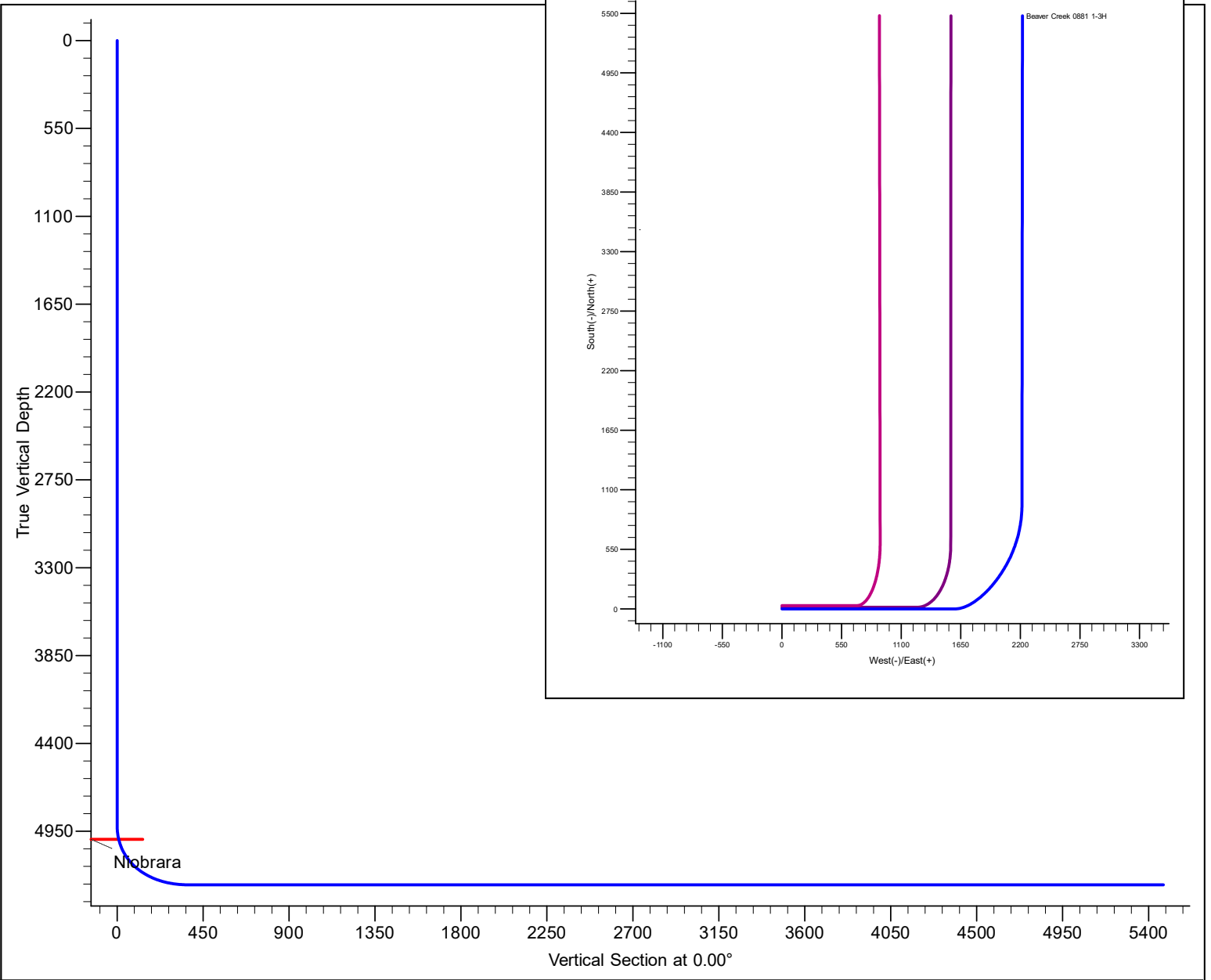


PROJECT DETAILS: North Park Basin					<div><div><div><div>G</div><div>T</div><div>M</div></div><div></div></div><div><div>Azimuths to Grid North</div><div>True North: 0.63°</div><div>Magnetic North: 10.56°</div><div>Magnetic Field</div><div>Strength: 53187.7snT</div><div>Dip Angle: 66.97°</div><div>Date: 12/31/2009</div><div>Model: IGRF200510</div></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				
TVDPath 5000.0 MDPATH 5428.9 Formation Niobrara DipAngle 0.00 DipDir					TVD 1997.5 MD 2000.0 Name 9 5/8" Surface Casing Size 2 1/2" 16727.0 5 1/2" Production Casing				
DESIGN DETAILS: Design #2					Project: North Park Basin Site: T7N-R81W-S10 Well: Beaver Creek 0881 1-3H Wellbore: Wellbore #1 Design: Design #2				
0' Vertical Section coordinates									
Type User	Target	Azimuth 0.00	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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0		
3	3077.8	31.56	90.00	2999.2	0.0	423.6	2.00	90.00	0.0		
4	5325.7	31.56	90.00	4914.7	0.0	1600.0	0.00	0.00	0.0		
5	6069.3	90.00	31.00	5285.0	372.5	2051.3	10.00	-62.89	372.5		
6	6688.2	90.00	0.05	5285.0	961.7	2215.0	5.00	-90.00	961.7	Beaver Creek 1	
7	11204.3	90.00	0.05	5285.0	5477.7	2219.1	0.00	0.00	5477.7	Beaver Creek 1	

SandRidge Energy

North Park Basin

T7N-R81W-S10

Beaver Creek 0881 1-3H

Wellbore #1

Plan: Design #2

Standard Survey Report

17 August, 2017

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Beaver Creek 0881 1-3H
Project:	North Park Basin	TVD Reference:	KB @ 8266.0usft
Site:	T7N-R81W-S10	MD Reference:	KB @ 8266.0usft
Well:	Beaver Creek 0881 1-3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #2	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-R81W-S10		
Site Position:		Northing:	1,462,405.44 usft
From:	Map	Easting:	2,729,967.12 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	40° 35' 55.092 N
		Longitude:	106° 28' 20.748 W
		Grid Convergence:	-0.63 °

Well	Beaver Creek 0881 1-3H		
Well Position	+N/-S	0.0 usft	Northing: 1,462,405.44 usft
	+E/-W	0.0 usft	Easting: 2,729,967.12 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	40° 35' 55.092 N
		Longitude:	106° 28' 20.748 W
		Ground Level:	8,250.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF200510	12/31/2009	9.93
			Dip Angle (°)
			66.97
			Field Strength (nT)
			53,188

Design	Design #2		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			0.00

Survey Tool Program	Date	8/17/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	11,204.2	Design #2 (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 Beaver Creek 0881 1-3H
Project:	North Park Basin	TVD Reference:	KB @ 8266.0usft
Site:	T7N-R81W-S10	MD Reference:	KB @ 8266.0usft
Well:	Beaver Creek 0881 1-3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #2	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
Start Build 2.00									
1,600.0	2.00	90.00	1,600.0	0.0	1.7	0.0	2.00	2.00	0.00
1,700.0	4.00	90.00	1,699.8	0.0	7.0	0.0	2.00	2.00	0.00
1,800.0	6.00	90.00	1,799.5	0.0	15.7	0.0	2.00	2.00	0.00
1,900.0	8.00	90.00	1,898.7	0.0	27.9	0.0	2.00	2.00	0.00
2,000.0	10.00	90.00	1,997.5	0.0	43.5	0.0	2.00	2.00	0.00
2,100.0	12.00	90.00	2,095.6	0.0	62.6	0.0	2.00	2.00	0.00
2,200.0	14.00	90.00	2,193.1	0.0	85.1	0.0	2.00	2.00	0.00
2,300.0	16.00	90.00	2,289.6	0.0	111.0	0.0	2.00	2.00	0.00
2,400.0	18.00	90.00	2,385.3	0.0	140.2	0.0	2.00	2.00	0.00
2,500.0	20.00	90.00	2,479.8	0.0	172.8	0.0	2.00	2.00	0.00
2,600.0	22.00	90.00	2,573.2	0.0	208.6	0.0	2.00	2.00	0.00
2,700.0	24.00	90.00	2,665.2	0.0	247.7	0.0	2.00	2.00	0.00
2,800.0	26.00	90.00	2,755.8	0.0	289.9	0.0	2.00	2.00	0.00
2,900.0	28.00	90.00	2,844.9	0.0	335.3	0.0	2.00	2.00	0.00
2,936.8	28.74	90.00	2,877.4	0.0	352.8	0.0	2.00	2.00	0.00
Start 2018.9 hold at 2936.8 MD									
3,000.0	30.00	90.00	2,932.4	0.0	383.8	0.0	2.00	2.00	0.00
3,077.8	31.56	90.00	2,999.2	0.0	423.6	0.0	2.00	2.00	0.00
3,100.0	31.56	90.00	3,018.2	0.0	435.2	0.0	0.00	0.00	0.00
3,200.0	31.56	90.00	3,103.4	0.0	487.6	0.0	0.00	0.00	0.00
3,300.0	31.56	90.00	3,188.6	0.0	539.9	0.0	0.00	0.00	0.00
3,400.0	31.56	90.00	3,273.8	0.0	592.2	0.0	0.00	0.00	0.00
3,500.0	31.56	90.00	3,359.0	0.0	644.6	0.0	0.00	0.00	0.00
3,600.0	31.56	90.00	3,444.2	0.0	696.9	0.0	0.00	0.00	0.00
3,700.0	31.56	90.00	3,529.4	0.0	749.2	0.0	0.00	0.00	0.00
3,800.0	31.56	90.00	3,614.6	0.0	801.6	0.0	0.00	0.00	0.00
3,900.0	31.56	90.00	3,699.9	0.0	853.9	0.0	0.00	0.00	0.00
4,000.0	31.56	90.00	3,785.1	0.0	906.2	0.0	0.00	0.00	0.00
4,100.0	31.56	90.00	3,870.3	0.0	958.6	0.0	0.00	0.00	0.00
4,200.0	31.56	90.00	3,955.5	0.0	1,010.9	0.0	0.00	0.00	0.00
4,300.0	31.56	90.00	4,040.7	0.0	1,063.2	0.0	0.00	0.00	0.00
4,400.0	31.56	90.00	4,125.9	0.0	1,115.6	0.0	0.00	0.00	0.00
4,500.0	31.56	90.00	4,211.1	0.0	1,167.9	0.0	0.00	0.00	0.00
4,600.0	31.56	90.00	4,296.3	0.0	1,220.2	0.0	0.00	0.00	0.00
4,700.0	31.56	90.00	4,381.6	0.0	1,272.6	0.0	0.00	0.00	0.00
4,800.0	31.56	90.00	4,466.8	0.0	1,324.9	0.0	0.00	0.00	0.00
4,900.0	31.56	90.00	4,552.0	0.0	1,377.2	0.0	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Beaver Creek 0881 1-3H
Project:	North Park Basin	TVD Reference:	KB @ 8266.0usft
Site:	T7N-R81W-S10	MD Reference:	KB @ 8266.0usft
Well:	Beaver Creek 0881 1-3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #2	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)
4,955.7	31.56	90.00	4,599.5	0.0	1,406.4	0.0	0.00	0.00	0.00
Start DLS 8.00 TFO 0.00									
5,000.0	31.56	90.00	4,637.2	0.0	1,429.6	0.0	0.00	0.00	0.00
5,100.0	31.56	90.00	4,722.4	0.0	1,481.9	0.0	0.00	0.00	0.00
5,200.0	31.56	90.00	4,807.6	0.0	1,534.2	0.0	0.00	0.00	0.00
5,300.0	31.56	90.00	4,892.8	0.0	1,586.6	0.0	0.00	0.00	0.00
5,325.7	31.56	90.00	4,914.7	0.0	1,600.0	0.0	0.00	0.00	0.00
5,346.5	32.55	86.55	4,932.4	0.3	1,611.1	0.3	10.00	4.79	-16.55
Start 150.0 hold at 5346.5 MD									
5,400.0	35.50	78.56	4,976.7	4.3	1,640.7	4.3	10.00	5.51	-14.93
5,428.9	37.29	74.73	5,000.0	8.3	1,657.3	8.3	10.00	6.19	-13.24
Niobrara									
5,496.5	41.89	66.94	5,052.1	22.5	1,697.9	22.5	10.00	6.80	-11.52
Start DLS 10.00 TFO -90.00									
5,500.0	42.14	66.58	5,054.7	23.4	1,700.1	23.4	10.00	7.18	-10.40
5,600.0	49.73	57.49	5,124.3	57.4	1,763.2	57.4	10.00	7.59	-9.09
5,700.0	57.88	50.30	5,183.3	105.0	1,828.1	105.0	10.00	8.15	-7.19
5,800.0	66.37	44.31	5,230.1	165.0	1,892.8	165.0	10.00	8.49	-5.98
5,900.0	75.07	39.07	5,263.1	235.5	1,955.4	235.5	10.00	8.69	-5.24
6,000.0	83.87	34.24	5,281.3	314.3	2,014.0	314.3	10.00	8.80	-4.83
6,069.3	90.00	31.00	5,285.0	372.5	2,051.3	372.5	10.00	8.84	-4.68
6,100.0	90.00	29.46	5,285.0	399.1	2,066.7	399.1	5.00	0.00	-5.00
6,200.0	90.00	24.46	5,285.0	488.2	2,112.1	488.2	5.00	0.00	-5.00
6,300.0	90.00	19.46	5,285.0	580.9	2,149.5	580.9	5.00	0.00	-5.00
6,396.5	90.00	14.64	5,285.0	673.1	2,177.8	673.1	5.00	0.00	-5.00
Start 5205.3 hold at 6396.5 MD									
6,400.0	90.00	14.46	5,285.0	676.5	2,178.6	676.5	5.00	0.00	-5.00
6,500.0	90.00	9.46	5,285.0	774.3	2,199.4	774.3	5.00	0.00	-5.00
6,600.0	90.00	4.46	5,285.0	873.5	2,211.5	873.5	5.00	0.00	-5.00
6,688.2	90.00	0.05	5,285.0	961.7	2,215.0	961.7	5.00	0.00	-5.00
6,700.0	90.00	0.05	5,285.0	973.4	2,215.0	973.4	0.00	0.00	0.00
6,800.0	90.00	0.05	5,285.0	1,073.4	2,215.1	1,073.4	0.00	0.00	0.00
6,900.0	90.00	0.05	5,285.0	1,173.4	2,215.2	1,173.4	0.00	0.00	0.00
7,000.0	90.00	0.05	5,285.0	1,273.4	2,215.2	1,273.4	0.00	0.00	0.00
7,100.0	90.00	0.05	5,285.0	1,373.4	2,215.3	1,373.4	0.00	0.00	0.00
7,200.0	90.00	0.05	5,285.0	1,473.4	2,215.4	1,473.4	0.00	0.00	0.00
7,300.0	90.00	0.05	5,285.0	1,573.4	2,215.5	1,573.4	0.00	0.00	0.00
7,400.0	90.00	0.05	5,285.0	1,673.4	2,215.6	1,673.4	0.00	0.00	0.00
7,500.0	90.00	0.05	5,285.0	1,773.4	2,215.7	1,773.4	0.00	0.00	0.00
7,600.0	90.00	0.05	5,285.0	1,873.4	2,215.8	1,873.4	0.00	0.00	0.00
7,700.0	90.00	0.05	5,285.0	1,973.4	2,215.9	1,973.4	0.00	0.00	0.00
7,800.0	90.00	0.05	5,285.0	2,073.4	2,216.0	2,073.4	0.00	0.00	0.00
7,900.0	90.00	0.05	5,285.0	2,173.4	2,216.1	2,173.4	0.00	0.00	0.00
8,000.0	90.00	0.05	5,285.0	2,273.4	2,216.2	2,273.4	0.00	0.00	0.00

SandRidge Energy

Survey Report

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Project:	North Park Basin	TVD Reference:	KB @ 8266.0usft
Site:	T7N-R81W-S10	MD Reference:	KB @ 8266.0usft
Well:	Beaver Creek 0881 1-3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #2	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)
8,100.0	90.00	0.05	5,285.0	2,373.4	2,216.3	2,373.4	0.00	0.00	0.00
8,200.0	90.00	0.05	5,285.0	2,473.4	2,216.4	2,473.4	0.00	0.00	0.00
8,300.0	90.00	0.05	5,285.0	2,573.4	2,216.5	2,573.4	0.00	0.00	0.00
8,400.0	90.00	0.05	5,285.0	2,673.4	2,216.5	2,673.4	0.00	0.00	0.00
8,500.0	90.00	0.05	5,285.0	2,773.4	2,216.6	2,773.4	0.00	0.00	0.00
8,600.0	90.00	0.05	5,285.0	2,873.4	2,216.7	2,873.4	0.00	0.00	0.00
8,700.0	90.00	0.05	5,285.0	2,973.4	2,216.8	2,973.4	0.00	0.00	0.00
8,800.0	90.00	0.05	5,285.0	3,073.4	2,216.9	3,073.4	0.00	0.00	0.00
8,900.0	90.00	0.05	5,285.0	3,173.4	2,217.0	3,173.4	0.00	0.00	0.00
9,000.0	90.00	0.05	5,285.0	3,273.4	2,217.1	3,273.4	0.00	0.00	0.00
9,100.0	90.00	0.05	5,285.0	3,373.4	2,217.2	3,373.4	0.00	0.00	0.00
9,200.0	90.00	0.05	5,285.0	3,473.4	2,217.3	3,473.4	0.00	0.00	0.00
9,300.0	90.00	0.05	5,285.0	3,573.4	2,217.4	3,573.4	0.00	0.00	0.00
9,400.0	90.00	0.05	5,285.0	3,673.4	2,217.5	3,673.4	0.00	0.00	0.00
9,500.0	90.00	0.05	5,285.0	3,773.4	2,217.6	3,773.4	0.00	0.00	0.00
9,600.0	90.00	0.05	5,285.0	3,873.4	2,217.7	3,873.4	0.00	0.00	0.00
9,700.0	90.00	0.05	5,285.0	3,973.4	2,217.7	3,973.4	0.00	0.00	0.00
9,800.0	90.00	0.05	5,285.0	4,073.4	2,217.8	4,073.4	0.00	0.00	0.00
9,900.0	90.00	0.05	5,285.0	4,173.4	2,217.9	4,173.4	0.00	0.00	0.00
10,000.0	90.00	0.05	5,285.0	4,273.4	2,218.0	4,273.4	0.00	0.00	0.00
10,100.0	90.00	0.05	5,285.0	4,373.4	2,218.1	4,373.4	0.00	0.00	0.00
10,200.0	90.00	0.05	5,285.0	4,473.4	2,218.2	4,473.4	0.00	0.00	0.00
10,300.0	90.00	0.05	5,285.0	4,573.4	2,218.3	4,573.4	0.00	0.00	0.00
10,400.0	90.00	0.05	5,285.0	4,673.4	2,218.4	4,673.4	0.00	0.00	0.00
10,500.0	90.00	0.05	5,285.0	4,773.4	2,218.5	4,773.4	0.00	0.00	0.00
10,600.0	90.00	0.05	5,285.0	4,873.4	2,218.6	4,873.4	0.00	0.00	0.00
10,700.0	90.00	0.05	5,285.0	4,973.4	2,218.7	4,973.4	0.00	0.00	0.00
10,800.0	90.00	0.05	5,285.0	5,073.4	2,218.8	5,073.4	0.00	0.00	0.00
10,900.0	90.00	0.05	5,285.0	5,173.4	2,218.9	5,173.4	0.00	0.00	0.00
11,000.0	90.00	0.05	5,285.0	5,273.4	2,219.0	5,273.4	0.00	0.00	0.00
11,100.0	90.00	0.05	5,285.0	5,373.4	2,219.0	5,373.4	0.00	0.00	0.00
11,200.0	90.00	0.05	5,285.0	5,473.4	2,219.1	5,473.4	0.00	0.00	0.00
11,204.3	90.00	0.05	5,285.0	5,477.7	2,219.1	5,477.7	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Beaver Creek 0881 1-3H
Project:	North Park Basin	TVD Reference:	KB @ 8266.0usft
Site:	T7N-R81W-S10	MD Reference:	KB @ 8266.0usft
Well:	Beaver Creek 0881 1-3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #2	Database:	EDMProd

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Beaver Creek 1 - plan hits target center - Point	0.00	360.00	5,285.0	5,477.7	2,219.1	1,467,883.12	2,732,186.26	40° 36' 49.456 N	106° 27' 52.754 W
Beaver Creek 1 MP - plan misses target center by 300.5usft at 11204.3usft MD (5285.0 TVD, 5477.7 N, 2219.1 E) - Point	0.00	360.00	5,285.0	5,778.2	2,219.8	1,468,183.66	2,732,186.94	40° 36' 52.426 N	106° 27' 52.788 W

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,000.0	1,997.5	9 5/8" Surface Casing	9-5/8	12-1/4	
16,727.0		5 1/2" Production Casing	5-1/2	8-3/4	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,428.9	5,000.0	Niobrara		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1500	1500	0	0	Start Build 2.00	
2937	2877	0	353	Start 2018.9 hold at 2936.8 MD	
4956	4599	0	1406	Start DLS 8.00 TFO 0.00	
5347	4932	0	1611	Start 150.0 hold at 5346.5 MD	
5497	5052	23	1698	Start DLS 10.00 TFO -90.00	
6396	5285	673	2178	Start 5205.3 hold at 6396.5 MD	
11,602				Start Turn 2.00	
11,705				Start 5022.4 hold at 11704.7 MD	
16,727				TD at 16727.0	

Checked By: _____ Approved By: _____ Date: _____

SandRidge Energy

North Park Basin

T7N-R81W-S10

Beaver Creek 0881 1-3H

Wellbore #1

Design #2

Anticollision Summary Report

17 August, 2017

SandRidge Energy

Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Beaver Creek 0881 1-3H
Project:	North Park Basin	TVD Reference:	KB @ 8266.0usft
Reference Site:	T7N-R81W-S10	MD Reference:	KB @ 8266.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Beaver Creek 0881 1-3H	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 #2	Offset TVD Reference:	Offset Datum

Reference	Design #2		
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	8/17/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	11,204.2	Design #2 (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-R81W-S10						
Beaver Creek 0881 2-3H - Wellbore #1 - Design #2	1,533.4	1,533.4	15.0	8.4	2.263	CC
Beaver Creek 0881 2-3H - Wellbore #1 - Design #2	1,600.0	1,600.0	15.1	8.2	2.180	ES, SF
Beaver Creek 0881 3-3H - Wellbore #1 - Design #2	1,542.1	1,542.1	30.0	23.3	4.502	CC
Beaver Creek 0881 3-3H - Wellbore #1 - Design #2	1,600.0	1,600.0	30.0	23.1	4.343	ES
Beaver Creek 0881 3-3H - Wellbore #1 - Design #2	1,700.0	1,699.8	30.7	23.4	4.185	SF

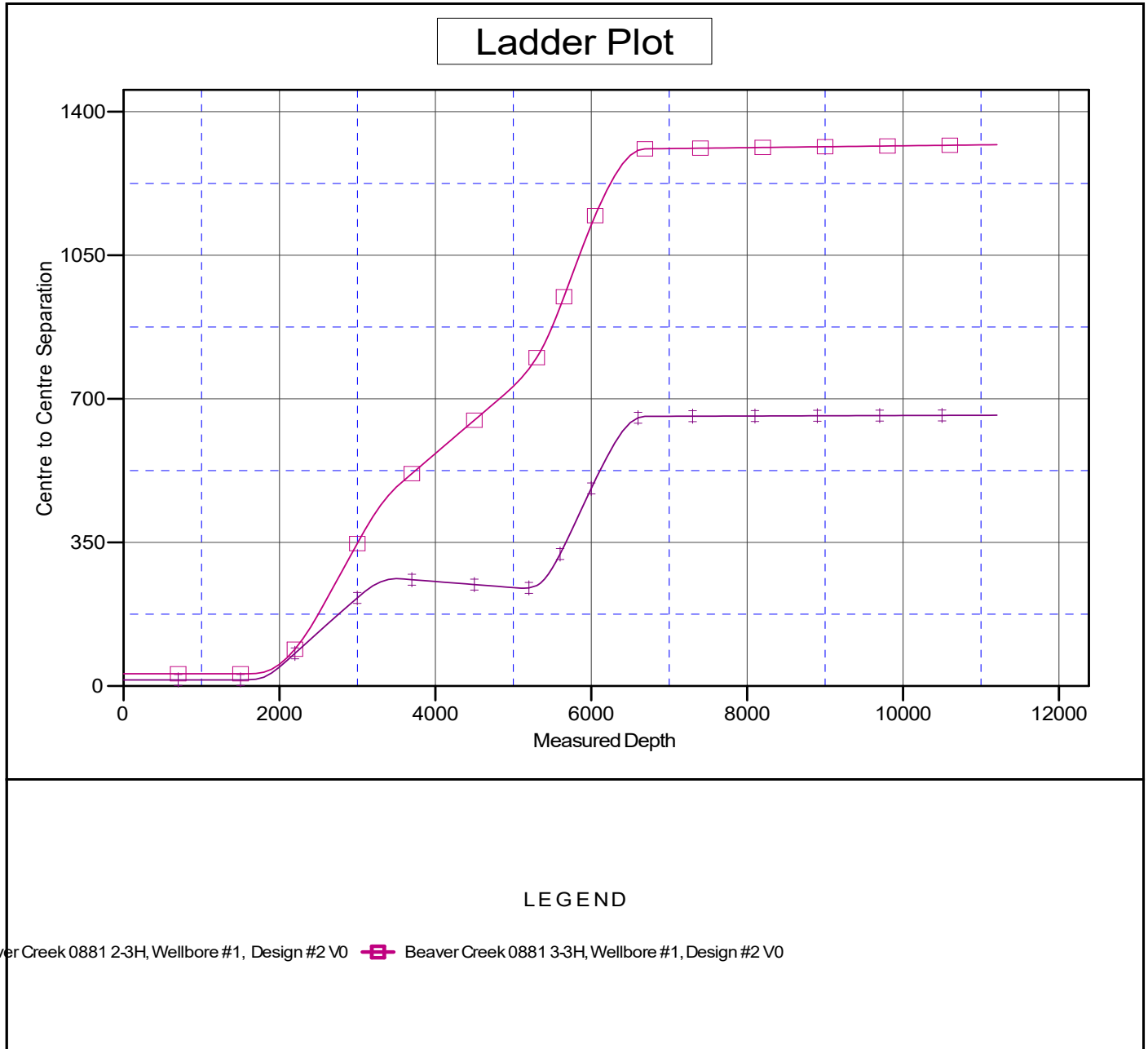
SandRidge Energy

Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Beaver Creek 0881 1-3H
Project:	North Park Basin	TVD Reference:	KB @ 8266.0usft
Reference Site:	T7N-R81W-S10	MD Reference:	KB @ 8266.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Beaver Creek 0881 1-3H	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 #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 8266.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Beaver Creek 0881 1-3H
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: -0.63°



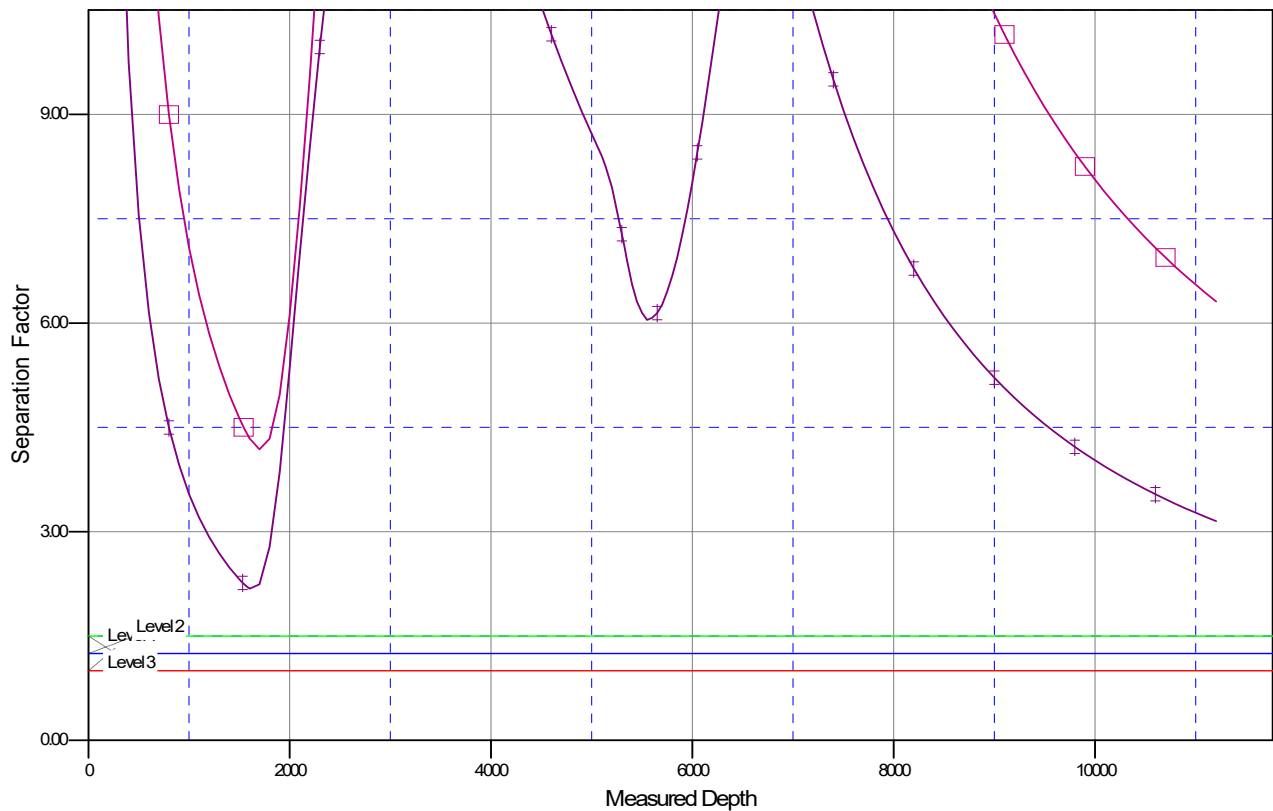
SandRidge Energy
Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Beaver Creek 0881 1-3H
Project:	North Park Basin	TVD Reference:	KB @ 8266.0usft
Reference Site:	T7N-R81W-S10	MD Reference:	KB @ 8266.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Beaver Creek 0881 1-3H	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 #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 8266.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Beaver Creek 0881 1-3H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.63°

Separation Factor Plot



LEGEND

Beaver Creek 0881 2-3H, Wellbore #1, Design #2 V0 — Beaver Creek 0881 3-3H, Wellbore #1, Design #2 V0