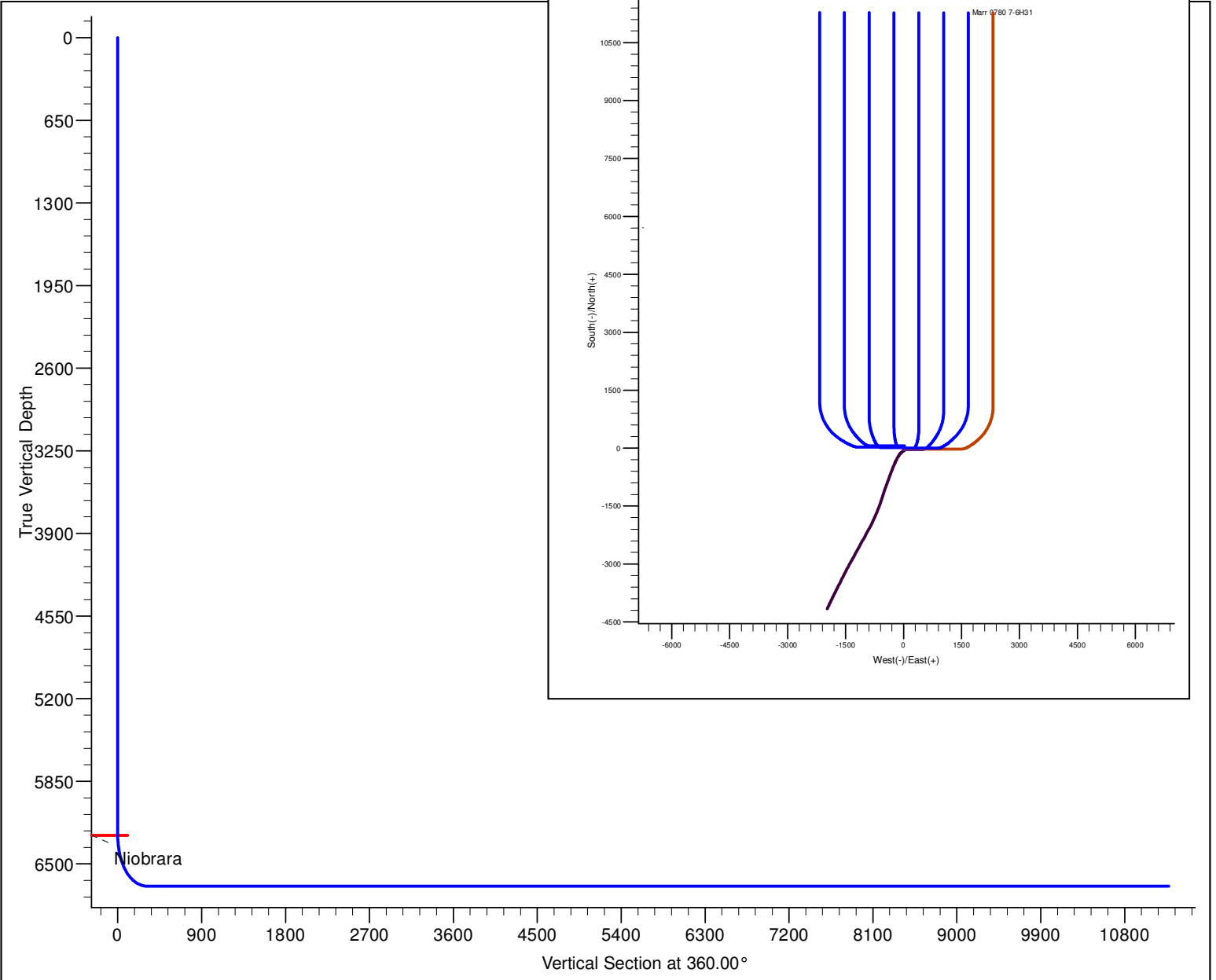


PROJECT DETAILS: North Park Basin					<div><div><div><div><div></div><div>G</div></div><div><div></div><div>T</div></div><div><div></div><div>M</div></div></div><div><div></div><div></div></div></div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div></div> <div><div>Azimuths to Grid North True North: 0.59° Magnetic North: 10.49° Magnetic Field Strength: 53195.2snT Dip Angle: 66.98° Date: 12/31/2009 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				
TVDPath MDPath Formation DipAngle DipDir 6275.0 6432.1 Niobrara 0.00					TVD MD Name Size 6675.0 7274.5 LP 5-1/2				
DESIGN DETAILS: Design #1					Project: North Park Basin Site: T7N-R80W-S7 Well: Marr 0780 7-6H31 Wellbore: Wellbore #1 Design: Design #1				
0' Vertical Section coordinates									
Type User	Target	Azimuth 360.00	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	3400.0	0.00	0.00	3400.0	0.0	0.0	0.00	0.00	0.0		
3	4458.2	21.16	90.00	4434.3	0.0	193.2	2.00	90.00	0.0		
4	6415.8	21.16	90.00	6259.9	0.0	900.0	0.00	0.00	0.0		
5	7172.8	90.00	43.20	6675.0	324.5	1365.5	10.00	-48.79	324.5		
6	8036.8	90.00	0.00	6675.0	1108.9	1676.0	5.00	-90.00	1108.9	Marr 0780 7-6H31 BHL	
7	18201.2	90.00	0.00	6675.0	11273.3	1676.0	0.00	0.00	11273.3	Marr 0780 7-6H31 BHL	

SandRidge Energy

North Park Basin

T7N-R80W-S7

Marr 0780 7-6H31

Wellbore #1

Plan: Design #1

Standard Survey Report

10 July, 2017

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Well:	Marr 0780 7-6H31	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMPProd

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-S7		
Site Position:		Northing:	1,462,096.65 usft
From:	Map	Easting:	2,745,719.49 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	40° 35' 53.698 N
		Longitude:	106° 24' 56.506 W
		Grid Convergence:	-0.59 °

Well	Marr 0780 7-6H31		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	40° 35' 54.104 N
		Longitude:	106° 24' 56.270 W
		Ground Level:	8,130.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF200510	12/31/2009	9.90
			Dip Angle
			(°)
			66.98
			Field Strength
			(nT)
			53,195

Design	Design #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			360.00

Survey Tool Program	Date	7/10/2017		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
0.0	18,201.2	Design #1 (Wellbore #1)	Sperry MWD	Fixed:v2:standard declination

Planned Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/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, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Well:	Marr 0780 7-6H31	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 2.00									
3,500.0	2.00	90.00	3,500.0	0.0	1.7	0.0	2.00	2.00	0.00
3,600.0	4.00	90.00	3,599.8	0.0	7.0	0.0	2.00	2.00	0.00
3,700.0	6.00	90.00	3,699.5	0.0	15.7	0.0	2.00	2.00	0.00
3,800.0	8.00	90.00	3,798.7	0.0	27.9	0.0	2.00	2.00	0.00
3,900.0	10.00	90.00	3,897.5	0.0	43.5	0.0	2.00	2.00	0.00
4,000.0	12.00	90.00	3,995.6	0.0	62.6	0.0	2.00	2.00	0.00
4,100.0	14.00	90.00	4,093.1	0.0	85.1	0.0	2.00	2.00	0.00
4,200.0	16.00	90.00	4,189.6	0.0	111.0	0.0	2.00	2.00	0.00
4,300.0	18.00	90.00	4,285.3	0.0	140.2	0.0	2.00	2.00	0.00
4,400.0	20.00	90.00	4,379.8	0.0	172.8	0.0	2.00	2.00	0.00
4,458.2	21.16	90.00	4,434.3	0.0	193.2	0.0	2.00	2.00	0.00
Start 1957.7 hold at 4458.2 MD									
4,500.0	21.16	90.00	4,473.3	0.0	208.3	0.0	0.00	0.00	0.00
4,600.0	21.16	90.00	4,566.5	0.0	244.4	0.0	0.00	0.00	0.00
4,700.0	21.16	90.00	4,659.8	0.0	280.5	0.0	0.00	0.00	0.00
4,800.0	21.16	90.00	4,753.0	0.0	316.6	0.0	0.00	0.00	0.00
4,900.0	21.16	90.00	4,846.3	0.0	352.7	0.0	0.00	0.00	0.00
5,000.0	21.16	90.00	4,939.6	0.0	388.8	0.0	0.00	0.00	0.00

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Well:	Marr 0780 7-6H31	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMPProd

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	21.16	90.00	5,032.8	0.0	424.9	0.0	0.00	0.00	0.00
5,200.0	21.16	90.00	5,126.1	0.0	461.0	0.0	0.00	0.00	0.00
5,300.0	21.16	90.00	5,219.3	0.0	497.1	0.0	0.00	0.00	0.00
5,400.0	21.16	90.00	5,312.6	0.0	533.2	0.0	0.00	0.00	0.00
5,500.0	21.16	90.00	5,405.8	0.0	569.4	0.0	0.00	0.00	0.00
5,600.0	21.16	90.00	5,499.1	0.0	605.5	0.0	0.00	0.00	0.00
5,700.0	21.16	90.00	5,592.3	0.0	641.6	0.0	0.00	0.00	0.00
5,800.0	21.16	90.00	5,685.6	0.0	677.7	0.0	0.00	0.00	0.00
5,900.0	21.16	90.00	5,778.9	0.0	713.8	0.0	0.00	0.00	0.00
6,000.0	21.16	90.00	5,872.1	0.0	749.9	0.0	0.00	0.00	0.00
6,100.0	21.16	90.00	5,965.4	0.0	786.0	0.0	0.00	0.00	0.00
6,200.0	21.16	90.00	6,058.6	0.0	822.1	0.0	0.00	0.00	0.00
6,300.0	21.16	90.00	6,151.9	0.0	858.2	0.0	0.00	0.00	0.00
6,400.0	21.16	90.00	6,245.1	0.0	894.3	0.0	0.00	0.00	0.00
6,415.8	21.16	90.00	6,259.9	0.0	900.0	0.0	0.00	0.00	0.00
Start DLS 10.00 TFO -48.79									
6,432.1	22.27	86.77	6,275.0	0.2	906.0	0.2	10.00	6.79	-19.86
Niobrara									
6,450.0	23.55	83.56	6,291.5	0.8	913.0	0.8	10.00	7.16	-17.95
6,500.0	27.41	76.16	6,336.6	4.6	934.1	4.6	10.00	7.73	-14.79
6,550.0	31.58	70.53	6,380.2	11.8	957.6	11.8	10.00	8.33	-11.27
6,600.0	35.94	66.11	6,421.7	22.1	983.4	22.1	10.00	8.72	-8.83
6,650.0	40.43	62.55	6,461.0	35.5	1,011.2	35.5	10.00	8.98	-7.13
6,700.0	45.01	59.59	6,497.7	51.9	1,040.9	51.9	10.00	9.16	-5.92
6,750.0	49.65	57.07	6,531.6	71.3	1,072.1	71.3	10.00	9.29	-5.03
6,800.0	54.35	54.88	6,562.4	93.3	1,104.7	93.3	10.00	9.39	-4.38
6,850.0	59.08	52.93	6,589.8	117.9	1,138.5	117.9	10.00	9.46	-3.89
6,900.0	63.83	51.17	6,613.7	145.0	1,173.1	145.0	10.00	9.51	-3.52
6,950.0	68.60	49.55	6,633.9	174.1	1,208.3	174.1	10.00	9.55	-3.25
7,000.0	73.39	48.03	6,650.2	205.3	1,243.9	205.3	10.00	9.58	-3.04
7,050.0	78.19	46.58	6,662.4	238.1	1,279.5	238.1	10.00	9.60	-2.89
7,100.0	83.00	45.19	6,670.6	272.5	1,314.9	272.5	10.00	9.61	-2.79
7,150.0	87.81	43.82	6,674.6	308.0	1,349.8	308.0	10.00	9.62	-2.74
7,172.8	90.00	43.20	6,675.0	324.5	1,365.5	324.5	10.00	9.62	-2.72
Start DLS 5.00 TFO -90.00									
7,200.0	90.00	41.84	6,675.0	344.6	1,383.9	344.6	5.00	0.00	-5.00
7,300.0	90.00	36.84	6,675.0	421.9	1,447.2	421.9	5.00	0.00	-5.00
7,400.0	90.00	31.84	6,675.0	504.5	1,503.6	504.5	5.00	0.00	-5.00
7,500.0	90.00	26.84	6,675.0	591.6	1,552.6	591.6	5.00	0.00	-5.00
7,600.0	90.00	21.84	6,675.0	682.7	1,593.8	682.7	5.00	0.00	-5.00
7,700.0	90.00	16.84	6,675.0	777.0	1,626.9	777.0	5.00	0.00	-5.00
7,800.0	90.00	11.84	6,675.0	873.9	1,651.7	873.9	5.00	0.00	-5.00
7,900.0	90.00	6.84	6,675.0	972.5	1,667.9	972.5	5.00	0.00	-5.00
8,000.0	90.00	1.84	6,675.0	1,072.2	1,675.4	1,072.2	5.00	0.00	-5.00

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Well:	Marr 0780 7-6H31	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMPProd

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)
8,036.8	90.00	0.00	6,675.0	1,108.9	1,676.0	1,108.9	5.00	0.00	-5.00
Start 10164.4 hold at 8036.8 MD									
8,100.0	90.00	0.00	6,675.0	1,172.2	1,676.0	1,172.2	0.00	0.00	0.00
8,200.0	90.00	0.00	6,675.0	1,272.2	1,676.0	1,272.2	0.00	0.00	0.00
8,300.0	90.00	0.00	6,675.0	1,372.2	1,676.0	1,372.2	0.00	0.00	0.00
8,400.0	90.00	0.00	6,675.0	1,472.2	1,676.0	1,472.2	0.00	0.00	0.00
8,500.0	90.00	0.00	6,675.0	1,572.2	1,676.0	1,572.2	0.00	0.00	0.00
8,600.0	90.00	0.00	6,675.0	1,672.2	1,676.0	1,672.2	0.00	0.00	0.00
8,700.0	90.00	0.00	6,675.0	1,772.2	1,676.0	1,772.2	0.00	0.00	0.00
8,800.0	90.00	0.00	6,675.0	1,872.2	1,676.0	1,872.2	0.00	0.00	0.00
8,900.0	90.00	0.00	6,675.0	1,972.2	1,676.0	1,972.2	0.00	0.00	0.00
9,000.0	90.00	0.00	6,675.0	2,072.2	1,676.0	2,072.2	0.00	0.00	0.00
9,100.0	90.00	0.00	6,675.0	2,172.2	1,676.0	2,172.2	0.00	0.00	0.00
9,200.0	90.00	0.00	6,675.0	2,272.2	1,676.0	2,272.2	0.00	0.00	0.00
9,300.0	90.00	0.00	6,675.0	2,372.2	1,676.0	2,372.2	0.00	0.00	0.00
9,400.0	90.00	0.00	6,675.0	2,472.2	1,676.0	2,472.2	0.00	0.00	0.00
9,500.0	90.00	0.00	6,675.0	2,572.2	1,676.0	2,572.2	0.00	0.00	0.00
9,600.0	90.00	0.00	6,675.0	2,672.2	1,676.0	2,672.2	0.00	0.00	0.00
9,700.0	90.00	0.00	6,675.0	2,772.2	1,676.0	2,772.2	0.00	0.00	0.00
9,800.0	90.00	0.00	6,675.0	2,872.2	1,676.0	2,872.2	0.00	0.00	0.00
9,900.0	90.00	0.00	6,675.0	2,972.2	1,676.0	2,972.2	0.00	0.00	0.00
10,000.0	90.00	0.00	6,675.0	3,072.2	1,676.0	3,072.2	0.00	0.00	0.00
10,100.0	90.00	0.00	6,675.0	3,172.2	1,676.0	3,172.2	0.00	0.00	0.00
10,200.0	90.00	0.00	6,675.0	3,272.2	1,676.0	3,272.2	0.00	0.00	0.00
10,300.0	90.00	0.00	6,675.0	3,372.2	1,676.0	3,372.2	0.00	0.00	0.00
10,400.0	90.00	0.00	6,675.0	3,472.2	1,676.0	3,472.2	0.00	0.00	0.00
10,500.0	90.00	0.00	6,675.0	3,572.2	1,676.0	3,572.2	0.00	0.00	0.00
10,600.0	90.00	0.00	6,675.0	3,672.2	1,676.0	3,672.2	0.00	0.00	0.00
10,700.0	90.00	0.00	6,675.0	3,772.2	1,676.0	3,772.2	0.00	0.00	0.00
10,800.0	90.00	0.00	6,675.0	3,872.2	1,676.0	3,872.2	0.00	0.00	0.00
10,900.0	90.00	0.00	6,675.0	3,972.2	1,676.0	3,972.2	0.00	0.00	0.00
11,000.0	90.00	0.00	6,675.0	4,072.2	1,676.0	4,072.2	0.00	0.00	0.00
11,100.0	90.00	0.00	6,675.0	4,172.2	1,676.0	4,172.2	0.00	0.00	0.00
11,200.0	90.00	0.00	6,675.0	4,272.2	1,676.0	4,272.2	0.00	0.00	0.00
11,300.0	90.00	0.00	6,675.0	4,372.2	1,676.0	4,372.2	0.00	0.00	0.00
11,400.0	90.00	0.00	6,675.0	4,472.2	1,676.0	4,472.2	0.00	0.00	0.00
11,500.0	90.00	0.00	6,675.0	4,572.2	1,676.0	4,572.2	0.00	0.00	0.00
11,600.0	90.00	0.00	6,675.0	4,672.2	1,676.0	4,672.2	0.00	0.00	0.00
11,700.0	90.00	0.00	6,675.0	4,772.2	1,676.0	4,772.2	0.00	0.00	0.00
11,800.0	90.00	0.00	6,675.0	4,872.2	1,676.0	4,872.2	0.00	0.00	0.00
11,900.0	90.00	0.00	6,675.0	4,972.2	1,676.0	4,972.2	0.00	0.00	0.00
12,000.0	90.00	0.00	6,675.0	5,072.2	1,676.0	5,072.2	0.00	0.00	0.00
12,100.0	90.00	0.00	6,675.0	5,172.2	1,676.0	5,172.2	0.00	0.00	0.00

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Well:	Marr 0780 7-6H31	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)
12,200.0	90.00	0.00	6,675.0	5,272.2	1,676.0	5,272.2	0.00	0.00	0.00
12,300.0	90.00	0.00	6,675.0	5,372.2	1,676.0	5,372.2	0.00	0.00	0.00
12,400.0	90.00	0.00	6,675.0	5,472.2	1,676.0	5,472.2	0.00	0.00	0.00
12,500.0	90.00	0.00	6,675.0	5,572.2	1,676.0	5,572.2	0.00	0.00	0.00
12,600.0	90.00	0.00	6,675.0	5,672.2	1,676.0	5,672.2	0.00	0.00	0.00
12,700.0	90.00	0.00	6,675.0	5,772.2	1,676.0	5,772.2	0.00	0.00	0.00
12,800.0	90.00	0.00	6,675.0	5,872.2	1,676.0	5,872.2	0.00	0.00	0.00
12,900.0	90.00	0.00	6,675.0	5,972.2	1,676.0	5,972.2	0.00	0.00	0.00
13,000.0	90.00	0.00	6,675.0	6,072.2	1,676.0	6,072.2	0.00	0.00	0.00
13,100.0	90.00	0.00	6,675.0	6,172.2	1,676.0	6,172.2	0.00	0.00	0.00
13,200.0	90.00	0.00	6,675.0	6,272.2	1,676.0	6,272.2	0.00	0.00	0.00
13,300.0	90.00	0.00	6,675.0	6,372.2	1,676.0	6,372.2	0.00	0.00	0.00
13,400.0	90.00	0.00	6,675.0	6,472.2	1,676.0	6,472.2	0.00	0.00	0.00
13,500.0	90.00	0.00	6,675.0	6,572.2	1,676.0	6,572.2	0.00	0.00	0.00
13,600.0	90.00	0.00	6,675.0	6,672.2	1,676.0	6,672.2	0.00	0.00	0.00
13,700.0	90.00	0.00	6,675.0	6,772.2	1,676.0	6,772.2	0.00	0.00	0.00
13,800.0	90.00	0.00	6,675.0	6,872.2	1,676.0	6,872.2	0.00	0.00	0.00
13,900.0	90.00	0.00	6,675.0	6,972.2	1,676.0	6,972.2	0.00	0.00	0.00
14,000.0	90.00	0.00	6,675.0	7,072.2	1,676.0	7,072.2	0.00	0.00	0.00
14,100.0	90.00	0.00	6,675.0	7,172.2	1,676.0	7,172.2	0.00	0.00	0.00
14,200.0	90.00	0.00	6,675.0	7,272.2	1,676.0	7,272.2	0.00	0.00	0.00
14,300.0	90.00	0.00	6,675.0	7,372.2	1,676.0	7,372.2	0.00	0.00	0.00
14,400.0	90.00	0.00	6,675.0	7,472.2	1,676.0	7,472.2	0.00	0.00	0.00
14,500.0	90.00	0.00	6,675.0	7,572.2	1,676.0	7,572.2	0.00	0.00	0.00
14,600.0	90.00	0.00	6,675.0	7,672.2	1,676.0	7,672.2	0.00	0.00	0.00
14,700.0	90.00	0.00	6,675.0	7,772.2	1,676.0	7,772.2	0.00	0.00	0.00
14,800.0	90.00	0.00	6,675.0	7,872.2	1,676.0	7,872.2	0.00	0.00	0.00
14,900.0	90.00	0.00	6,675.0	7,972.2	1,676.0	7,972.2	0.00	0.00	0.00
15,000.0	90.00	0.00	6,675.0	8,072.2	1,676.0	8,072.2	0.00	0.00	0.00
15,100.0	90.00	0.00	6,675.0	8,172.2	1,676.0	8,172.2	0.00	0.00	0.00
15,200.0	90.00	0.00	6,675.0	8,272.2	1,676.0	8,272.2	0.00	0.00	0.00
15,300.0	90.00	0.00	6,675.0	8,372.2	1,676.0	8,372.2	0.00	0.00	0.00
15,400.0	90.00	0.00	6,675.0	8,472.2	1,676.0	8,472.2	0.00	0.00	0.00
15,500.0	90.00	0.00	6,675.0	8,572.2	1,676.0	8,572.2	0.00	0.00	0.00
15,600.0	90.00	0.00	6,675.0	8,672.2	1,676.0	8,672.2	0.00	0.00	0.00
15,700.0	90.00	0.00	6,675.0	8,772.2	1,676.0	8,772.2	0.00	0.00	0.00
15,800.0	90.00	0.00	6,675.0	8,872.2	1,676.0	8,872.2	0.00	0.00	0.00
15,900.0	90.00	0.00	6,675.0	8,972.2	1,676.0	8,972.2	0.00	0.00	0.00
16,000.0	90.00	0.00	6,675.0	9,072.2	1,676.0	9,072.2	0.00	0.00	0.00
16,100.0	90.00	0.00	6,675.0	9,172.2	1,676.0	9,172.2	0.00	0.00	0.00
16,200.0	90.00	0.00	6,675.0	9,272.2	1,676.0	9,272.2	0.00	0.00	0.00
16,300.0	90.00	0.00	6,675.0	9,372.2	1,676.0	9,372.2	0.00	0.00	0.00
16,400.0	90.00	0.00	6,675.0	9,472.2	1,676.0	9,472.2	0.00	0.00	0.00
16,500.0	90.00	0.00	6,675.0	9,572.2	1,676.0	9,572.2	0.00	0.00	0.00

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Well:	Marr 0780 7-6H31	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMPProd

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)
16,600.0	90.00	0.00	6,675.0	9,672.2	1,676.0	9,672.2	0.00	0.00	0.00
16,700.0	90.00	0.00	6,675.0	9,772.2	1,676.0	9,772.2	0.00	0.00	0.00
16,800.0	90.00	0.00	6,675.0	9,872.2	1,676.0	9,872.2	0.00	0.00	0.00
16,900.0	90.00	0.00	6,675.0	9,972.2	1,676.0	9,972.2	0.00	0.00	0.00
17,000.0	90.00	0.00	6,675.0	10,072.2	1,676.0	10,072.2	0.00	0.00	0.00
17,100.0	90.00	0.00	6,675.0	10,172.2	1,676.0	10,172.2	0.00	0.00	0.00
17,200.0	90.00	0.00	6,675.0	10,272.2	1,676.0	10,272.2	0.00	0.00	0.00
17,300.0	90.00	0.00	6,675.0	10,372.2	1,676.0	10,372.2	0.00	0.00	0.00
17,400.0	90.00	0.00	6,675.0	10,472.2	1,676.0	10,472.2	0.00	0.00	0.00
17,500.0	90.00	0.00	6,675.0	10,572.2	1,676.0	10,572.2	0.00	0.00	0.00
17,600.0	90.00	0.00	6,675.0	10,672.2	1,676.0	10,672.2	0.00	0.00	0.00
17,700.0	90.00	0.00	6,675.0	10,772.2	1,676.0	10,772.2	0.00	0.00	0.00
17,800.0	90.00	0.00	6,675.0	10,872.2	1,676.0	10,872.2	0.00	0.00	0.00
17,900.0	90.00	0.00	6,675.0	10,972.2	1,676.0	10,972.2	0.00	0.00	0.00
18,000.0	90.00	0.00	6,675.0	11,072.2	1,676.0	11,072.2	0.00	0.00	0.00
18,100.0	90.00	0.00	6,675.0	11,172.2	1,676.0	11,172.2	0.00	0.00	0.00
18,201.2	90.00	0.00	6,675.0	11,273.3	1,676.0	11,273.3	0.00	0.00	0.00
TD at 18201.2									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Marr 0780 7-6H31 BHL	0.00	360.00	6,675.0	11,273.3	1,676.0	1,473,410.94	2,747,414.17	40° 37' 45.667 N	106° 24' 36.043 W
- plan hits target center									
- Point									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,432.1	6,275.0	Niobrara		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3400	3400	0	0	Start Build 2.00
4458	4434	0	193	Start 1957.7 hold at 4458.2 MD
6416	6260	0	900	Start DLS 10.00 TFO -48.79
7173	6675	325	1365	Start DLS 5.00 TFO -90.00
8037	6675	1109	1676	Start 10164.4 hold at 8036.8 MD
18,201	6675	11,273	1676	TD at 18201.2

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Well:	Marr 0780 7-6H31	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Checked By: _____ Approved By: _____ Date: _____

SandRidge Energy

North Park Basin

T7N-R80W-S7

Marr 0780 7-6H31

Wellbore #1

Design #1

Anticollision Summary Report

10 July, 2017

SandRidge Energy, Inc.
Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Reference Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Marr 0780 7-6H31	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	7/10/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,201.2	Design #1 (Wellbore #1)	Sperry MWD	Fixed:v2:standard declination

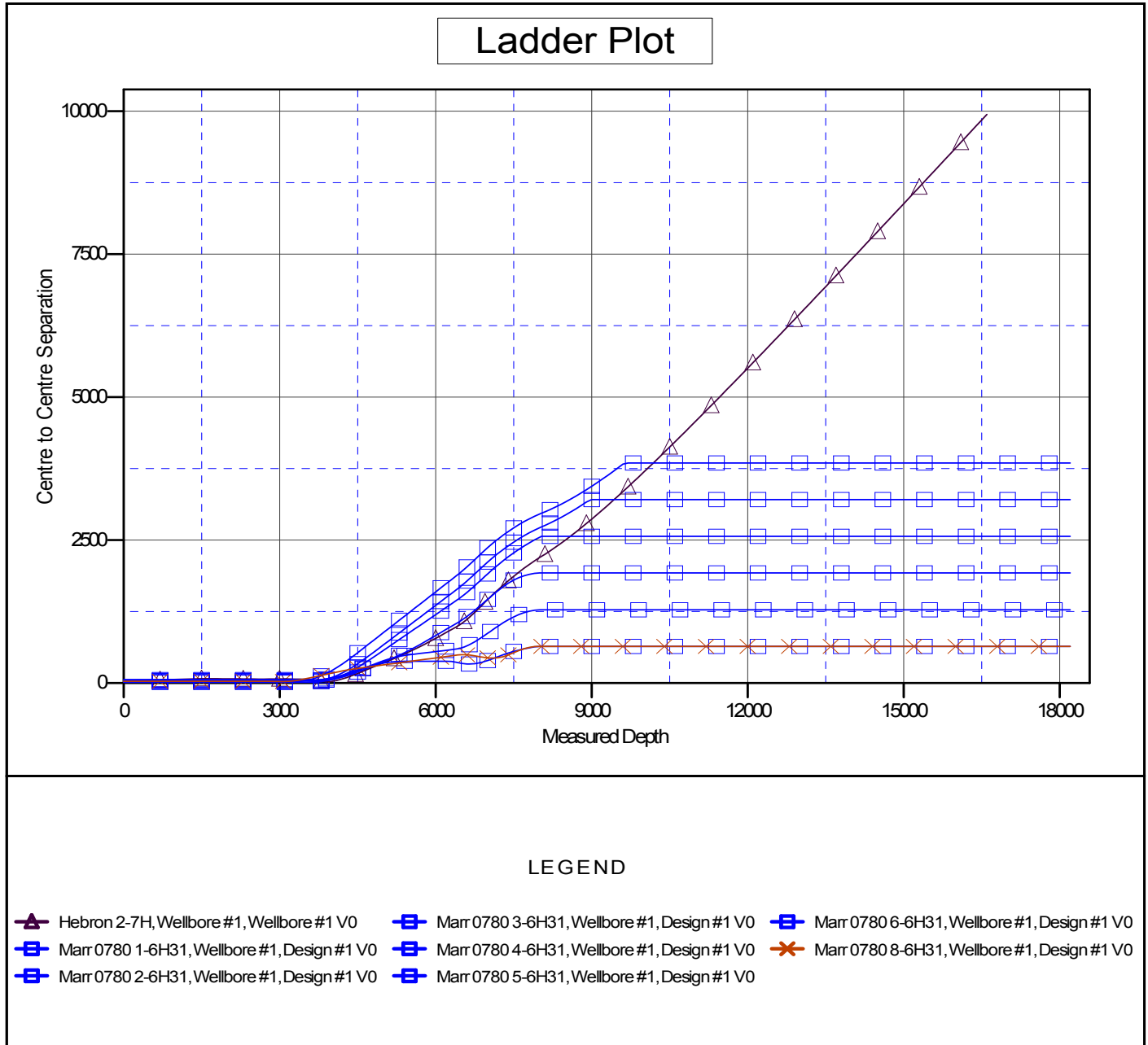
Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
T7N-R80W-S7						
Hebron 2-7H - Wellbore #1 - Wellbore #1	3,936.3	3,934.4	24.3	7.6	1.454	Level 3, CC, ES, SF
Marr 0780 1-6H31 - Wellbore #1 - Design #1	3,268.1	3,268.6	27.3	12.9	1.897	Level 4, CC, ES
Marr 0780 1-6H31 - Wellbore #1 - Design #1	3,300.0	3,300.3	27.4	12.9	1.892	Level 4, SF
Marr 0780 2-6H31 - Wellbore #1 - Design #1	3,713.9	3,712.5	54.5	38.2	3.338	CC, ES, SF
Marr 0780 3-6H31 - Wellbore #1 - Design #1	3,589.6	3,588.4	13.7	-2.1	0.866	Level 1, CC
Marr 0780 3-6H31 - Wellbore #1 - Design #1	3,600.0	3,598.8	13.7	-2.2	0.864	Level 1, ES, SF
Marr 0780 4-6H31 - Wellbore #1 - Design #1	3,728.7	3,727.0	40.9	24.4	2.486	CC, ES, SF
Marr 0780 5-6H31 - Wellbore #1 - Design #1	3,400.0	3,400.2	14.4	-0.6	0.957	Level 1, CC, ES, SF
Marr 0780 6-6H31 - Wellbore #1 - Design #1	3,400.0	3,399.0	44.8	29.8	2.986	CC, ES
Marr 0780 6-6H31 - Wellbore #1 - Design #1	18,201.2	18,028.7	640.7	88.6	1.160	Level 2, SF
Marr 0780 8-6H31 - Wellbore #1 - Design #1	3,066.9	3,067.3	27.3	13.8	2.028	CC, ES
Marr 0780 8-6H31 - Wellbore #1 - Design #1	18,201.2	18,485.3	640.7	212.2	1.495	Level 3, SF

SandRidge Energy, Inc.
Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Reference Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Marr 0780 7-6H31	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 KB @ 8146.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Marr 0780 7-6H31
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.59°



SandRidge Energy, Inc.

Anticollision Summary Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Marr 0780 7-6H31
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Reference Site:	T7N-R80W-S7	MD Reference:	KB @ 8146.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Marr 0780 7-6H31	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 KB @ 8146.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Marr 0780 7-6H31
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.59°

