

SandRidge Energy

North Park Basin

T7N-R81W-S12

Grizzly 0881 4-1H36

Wellbore #1

Plan: Design #1

Standard Survey Report

16 January, 2017

PROJECT DETAILS: North Park Basin


Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level

G

T

M



Azimuths to Grid North
True North: 0.60°
Magnetic North: 10.50°

Magnetic Field
Strength: 53193.9snT
Dip Angle: 66.98°
Date: 12/31/2009
Model: IGRF200510

FORMATION TOP DETAILS

TVDPath
6380.0

MDPath
6637.5

Formation
Niobrara

DipAngle
0.00

DipDir

CASING DETAILS

No casing data is available

DESIGN DETAILS: Design #1

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

Project: North Park Basin
Site: T7N-R81W-S12
Well: Grizzly 0881 4-1H36
Wellbore: Wellbore #1
Design: Design #1

True Vertical Depth

0

650

1300

1950

2600

3250

3900

4550

5200

5850

6500

Niobrara

0

900

1800

2700

3600

4500

5400

6300

7200

8100

9000

9900

10800

Vertical Section at 0.00°

10000

8000

6000

4000

2000

0

-2000

-4000

Grizzly 4

South(-)/North(+)

West(-)/East(+)

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	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	
3	3541.5	20.83	269.03	3518.7	-3.2	-187.2	2.00	269.03	-3.2	
4	6327.8	20.83	269.03	6122.9	-20.0	-1177.9	0.00	0.00	-20.0	
5	6817.5	60.00	270.00	6488.5	-21.5	-1489.2	8.00	1.33	-21.5	
6	6967.5	60.00	270.00	6563.5	-21.5	-1619.1	0.00	0.00	-21.5	
7	7867.5	90.00	0.00	6850.0	551.4	-2115.3	10.00	90.00	551.4	Grizzly 4
8	18624.4	90.00	0.00	6850.0	11308.4	-2114.9	0.00	0.00	11308.4	Grizzly 4

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Grizzly 0881 4-1H36
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R81W-S12	MD Reference:	KB @ 8146.0usft
Well:	Grizzly 0881 4-1H36	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	T8N-R81W-S7					
Site Position:		Northing:	1,462,087.17 usft	Latitude:	40° 35' 53.334 N	
From:	Map	Easting:	2,743,086.13 usft	Longitude:	106° 25' 30.641 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.60 °

Well	Grizzly 0881 4-1H36					
Well Position	+N-S	0.0 usft	Northing:	1,462,087.67 usft	Latitude:	40° 35' 53.334 N
	+E-W	0.0 usft	Easting:	2,743,041.20 usft	Longitude:	106° 25' 31.224 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,130.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	9.90	66.98	53,194

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		0.00

Survey Tool Program	Date	1/16/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	18,624.4	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	

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Well:	Grizzly 0881 4-1H36	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
Start Build 2.00									
2,600.0	2.00	269.03	2,600.0	0.0	-1.7	0.0	2.00	2.00	0.00
2,700.0	4.00	269.03	2,699.8	-0.1	-7.0	-0.1	2.00	2.00	0.00
2,800.0	6.00	269.03	2,799.5	-0.3	-15.7	-0.3	2.00	2.00	0.00
2,900.0	8.00	269.03	2,898.7	-0.5	-27.9	-0.5	2.00	2.00	0.00
3,000.0	10.00	269.03	2,997.5	-0.7	-43.5	-0.7	2.00	2.00	0.00
3,100.0	12.00	269.03	3,095.6	-1.1	-62.6	-1.1	2.00	2.00	0.00
3,200.0	14.00	269.03	3,193.1	-1.4	-85.1	-1.4	2.00	2.00	0.00
3,300.0	16.00	269.03	3,289.6	-1.9	-111.0	-1.9	2.00	2.00	0.00
3,400.0	18.00	269.03	3,385.3	-2.4	-140.2	-2.4	2.00	2.00	0.00
3,500.0	20.00	269.03	3,479.8	-2.9	-172.7	-2.9	2.00	2.00	0.00
3,541.5	20.83	269.03	3,518.7	-3.2	-187.2	-3.2	2.00	2.00	0.00
Start 2786.3 hold at 3541.5 MD									
3,600.0	20.83	269.03	3,573.4	-3.5	-208.0	-3.5	0.00	0.00	0.00
3,700.0	20.83	269.03	3,666.8	-4.1	-243.6	-4.1	0.00	0.00	0.00
3,800.0	20.83	269.03	3,760.3	-4.7	-279.1	-4.7	0.00	0.00	0.00
3,900.0	20.83	269.03	3,853.8	-5.3	-314.7	-5.3	0.00	0.00	0.00
4,000.0	20.83	269.03	3,947.2	-5.9	-350.2	-5.9	0.00	0.00	0.00
4,100.0	20.83	269.03	4,040.7	-6.6	-385.8	-6.6	0.00	0.00	0.00
4,200.0	20.83	269.03	4,134.2	-7.2	-421.3	-7.2	0.00	0.00	0.00
4,300.0	20.83	269.03	4,227.6	-7.8	-456.9	-7.8	0.00	0.00	0.00
4,400.0	20.83	269.03	4,321.1	-8.4	-492.5	-8.4	0.00	0.00	0.00
4,500.0	20.83	269.03	4,414.6	-9.0	-528.0	-9.0	0.00	0.00	0.00
4,600.0	20.83	269.03	4,508.0	-9.6	-563.6	-9.6	0.00	0.00	0.00
4,700.0	20.83	269.03	4,601.5	-10.2	-599.1	-10.2	0.00	0.00	0.00
4,800.0	20.83	269.03	4,694.9	-10.8	-634.7	-10.8	0.00	0.00	0.00
4,900.0	20.83	269.03	4,788.4	-11.4	-670.2	-11.4	0.00	0.00	0.00
5,000.0	20.83	269.03	4,881.9	-12.0	-705.8	-12.0	0.00	0.00	0.00

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Well:	Grizzly 0881 4-1H36	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	20.83	269.03	4,975.3	-12.6	-741.3	-12.6	0.00	0.00	0.00
5,200.0	20.83	269.03	5,068.8	-13.2	-776.9	-13.2	0.00	0.00	0.00
5,300.0	20.83	269.03	5,162.3	-13.8	-812.5	-13.8	0.00	0.00	0.00
5,400.0	20.83	269.03	5,255.7	-14.4	-848.0	-14.4	0.00	0.00	0.00
5,500.0	20.83	269.03	5,349.2	-15.0	-883.6	-15.0	0.00	0.00	0.00
5,600.0	20.83	269.03	5,442.7	-15.6	-919.1	-15.6	0.00	0.00	0.00
5,700.0	20.83	269.03	5,536.1	-16.2	-954.7	-16.2	0.00	0.00	0.00
5,800.0	20.83	269.03	5,629.6	-16.8	-990.2	-16.8	0.00	0.00	0.00
5,900.0	20.83	269.03	5,723.0	-17.4	-1,025.8	-17.4	0.00	0.00	0.00
6,000.0	20.83	269.03	5,816.5	-18.0	-1,061.3	-18.0	0.00	0.00	0.00
6,100.0	20.83	269.03	5,910.0	-18.6	-1,096.9	-18.6	0.00	0.00	0.00
6,200.0	20.83	269.03	6,003.4	-19.2	-1,132.5	-19.2	0.00	0.00	0.00
6,300.0	20.83	269.03	6,096.9	-19.8	-1,168.0	-19.8	0.00	0.00	0.00
6,327.8	20.83	269.03	6,122.9	-20.0	-1,177.9	-20.0	0.00	0.00	0.00
Start DLS 8.00 TFO 1.33									
6,350.0	22.60	269.13	6,143.5	-20.1	-1,186.1	-20.1	8.00	8.00	0.48
6,400.0	26.60	269.33	6,189.0	-20.4	-1,206.9	-20.4	8.00	8.00	0.38
6,450.0	30.60	269.47	6,232.8	-20.7	-1,230.9	-20.7	8.00	8.00	0.29
6,500.0	34.60	269.59	6,275.0	-20.9	-1,257.8	-20.9	8.00	8.00	0.23
6,550.0	38.60	269.68	6,315.1	-21.1	-1,287.6	-21.1	8.00	8.00	0.19
6,600.0	42.60	269.76	6,353.0	-21.2	-1,320.1	-21.2	8.00	8.00	0.16
6,637.5	45.61	269.81	6,380.0	-21.3	-1,346.2	-21.3	8.00	8.00	0.14
Niobrara									
6,650.0	46.60	269.83	6,388.6	-21.4	-1,355.2	-21.4	8.00	8.00	0.13
6,700.0	50.60	269.88	6,421.7	-21.4	-1,392.7	-21.4	8.00	8.00	0.12
6,750.0	54.60	269.94	6,452.1	-21.5	-1,432.4	-21.5	8.00	8.00	0.11
6,800.0	58.60	269.98	6,479.6	-21.5	-1,474.2	-21.5	8.00	8.00	0.10
6,817.5	60.00	270.00	6,488.5	-21.5	-1,489.2	-21.5	8.00	8.00	0.09
Start 150.0 hold at 6817.5 MD									
6,900.0	60.00	270.00	6,529.8	-21.5	-1,560.7	-21.5	0.00	0.00	0.00
6,967.5	60.00	270.00	6,563.5	-21.5	-1,619.1	-21.5	0.00	0.00	0.00
Start DLS 10.00 TFO 90.00									
7,000.0	60.05	273.75	6,579.8	-20.6	-1,647.3	-20.6	10.00	0.16	11.54
7,050.0	60.34	279.51	6,604.6	-15.6	-1,690.3	-15.6	10.00	0.58	11.51
7,100.0	60.88	285.21	6,629.2	-6.3	-1,732.9	-6.3	10.00	1.07	11.41
7,150.0	61.65	290.85	6,653.2	7.3	-1,774.5	7.3	10.00	1.55	11.27
7,200.0	62.65	296.39	6,676.6	25.0	-1,815.0	25.0	10.00	2.00	11.08
7,250.0	63.87	301.82	6,699.1	46.7	-1,854.0	46.7	10.00	2.43	10.86
7,300.0	65.28	307.13	6,720.6	72.3	-1,891.2	72.3	10.00	2.83	10.62
7,350.0	66.88	312.31	6,740.9	101.5	-1,926.3	101.5	10.00	3.19	10.37
7,400.0	68.64	317.37	6,759.8	134.1	-1,959.1	134.1	10.00	3.53	10.11
7,450.0	70.55	322.30	6,777.2	169.9	-1,989.3	169.9	10.00	3.82	9.86
7,500.0	72.59	327.11	6,793.1	208.6	-2,016.7	208.6	10.00	4.08	9.62
7,550.0	74.75	331.81	6,807.1	249.9	-2,041.1	249.9	10.00	4.31	9.41

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7,600.0	76.99	336.42	6,819.3	293.5	-2,062.2	293.5	10.00	4.50	9.21
7,650.0	79.32	340.94	6,829.6	339.1	-2,080.0	339.1	10.00	4.66	9.04
7,700.0	81.71	345.39	6,837.8	386.3	-2,094.3	386.3	10.00	4.78	8.90
7,750.0	84.16	349.79	6,844.0	434.8	-2,104.9	434.8	10.00	4.88	8.79
7,800.0	86.63	354.15	6,848.0	484.1	-2,111.9	484.1	10.00	4.95	8.72
7,850.0	89.13	358.49	6,849.9	533.9	-2,115.1	533.9	10.00	4.99	8.67
7,867.5	90.00	0.00	6,850.0	551.4	-2,115.3	551.4	10.02	5.01	8.68
Start 10757.0 hold at 7867.5 MD									
7,900.0	90.00	0.00	6,850.0	583.9	-2,115.3	583.9	0.00	0.00	0.00
8,000.0	90.00	0.00	6,850.0	683.9	-2,115.3	683.9	0.00	0.00	0.00
8,100.0	90.00	0.00	6,850.0	783.9	-2,115.3	783.9	0.00	0.00	0.00
8,200.0	90.00	0.00	6,850.0	883.9	-2,115.3	883.9	0.00	0.00	0.00
8,300.0	90.00	0.00	6,850.0	983.9	-2,115.3	983.9	0.00	0.00	0.00
8,400.0	90.00	0.00	6,850.0	1,083.9	-2,115.3	1,083.9	0.00	0.00	0.00
8,500.0	90.00	0.00	6,850.0	1,183.9	-2,115.3	1,183.9	0.00	0.00	0.00
8,600.0	90.00	0.00	6,850.0	1,283.9	-2,115.3	1,283.9	0.00	0.00	0.00
8,700.0	90.00	0.00	6,850.0	1,383.9	-2,115.2	1,383.9	0.00	0.00	0.00
8,800.0	90.00	0.00	6,850.0	1,483.9	-2,115.2	1,483.9	0.00	0.00	0.00
8,900.0	90.00	0.00	6,850.0	1,583.9	-2,115.2	1,583.9	0.00	0.00	0.00
9,000.0	90.00	0.00	6,850.0	1,683.9	-2,115.2	1,683.9	0.00	0.00	0.00
9,100.0	90.00	0.00	6,850.0	1,783.9	-2,115.2	1,783.9	0.00	0.00	0.00
9,200.0	90.00	0.00	6,850.0	1,883.9	-2,115.2	1,883.9	0.00	0.00	0.00
9,300.0	90.00	0.00	6,850.0	1,983.9	-2,115.2	1,983.9	0.00	0.00	0.00
9,400.0	90.00	0.00	6,850.0	2,083.9	-2,115.2	2,083.9	0.00	0.00	0.00
9,500.0	90.00	0.00	6,850.0	2,183.9	-2,115.2	2,183.9	0.00	0.00	0.00
9,600.0	90.00	0.00	6,850.0	2,283.9	-2,115.2	2,283.9	0.00	0.00	0.00
9,700.0	90.00	0.00	6,850.0	2,383.9	-2,115.2	2,383.9	0.00	0.00	0.00
9,800.0	90.00	0.00	6,850.0	2,483.9	-2,115.2	2,483.9	0.00	0.00	0.00
9,900.0	90.00	0.00	6,850.0	2,583.9	-2,115.2	2,583.9	0.00	0.00	0.00
10,000.0	90.00	0.00	6,850.0	2,683.9	-2,115.2	2,683.9	0.00	0.00	0.00
10,100.0	90.00	0.00	6,850.0	2,783.9	-2,115.2	2,783.9	0.00	0.00	0.00
10,200.0	90.00	0.00	6,850.0	2,883.9	-2,115.2	2,883.9	0.00	0.00	0.00
10,300.0	90.00	0.00	6,850.0	2,983.9	-2,115.2	2,983.9	0.00	0.00	0.00
10,400.0	90.00	0.00	6,850.0	3,083.9	-2,115.2	3,083.9	0.00	0.00	0.00
10,500.0	90.00	0.00	6,850.0	3,183.9	-2,115.2	3,183.9	0.00	0.00	0.00
10,600.0	90.00	0.00	6,850.0	3,283.9	-2,115.2	3,283.9	0.00	0.00	0.00
10,700.0	90.00	0.00	6,850.0	3,383.9	-2,115.2	3,383.9	0.00	0.00	0.00
10,800.0	90.00	0.00	6,850.0	3,483.9	-2,115.2	3,483.9	0.00	0.00	0.00
10,900.0	90.00	0.00	6,850.0	3,583.9	-2,115.2	3,583.9	0.00	0.00	0.00
11,000.0	90.00	0.00	6,850.0	3,683.9	-2,115.2	3,683.9	0.00	0.00	0.00
11,100.0	90.00	0.00	6,850.0	3,783.9	-2,115.2	3,783.9	0.00	0.00	0.00
11,200.0	90.00	0.00	6,850.0	3,883.9	-2,115.2	3,883.9	0.00	0.00	0.00
11,300.0	90.00	0.00	6,850.0	3,983.9	-2,115.2	3,983.9	0.00	0.00	0.00
11,400.0	90.00	0.00	6,850.0	4,083.9	-2,115.2	4,083.9	0.00	0.00	0.00

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Grizzly 0881 4-1H36
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R81W-S12	MD Reference:	KB @ 8146.0usft
Well:	Grizzly 0881 4-1H36	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)
11,500.0	90.00	0.00	6,850.0	4,183.9	-2,115.2	4,183.9	0.00	0.00	0.00
11,600.0	90.00	0.00	6,850.0	4,283.9	-2,115.1	4,283.9	0.00	0.00	0.00
11,700.0	90.00	0.00	6,850.0	4,383.9	-2,115.1	4,383.9	0.00	0.00	0.00
11,800.0	90.00	0.00	6,850.0	4,483.9	-2,115.1	4,483.9	0.00	0.00	0.00
11,900.0	90.00	0.00	6,850.0	4,583.9	-2,115.1	4,583.9	0.00	0.00	0.00
12,000.0	90.00	0.00	6,850.0	4,683.9	-2,115.1	4,683.9	0.00	0.00	0.00
12,100.0	90.00	0.00	6,850.0	4,783.9	-2,115.1	4,783.9	0.00	0.00	0.00
12,200.0	90.00	0.00	6,850.0	4,883.9	-2,115.1	4,883.9	0.00	0.00	0.00
12,300.0	90.00	0.00	6,850.0	4,983.9	-2,115.1	4,983.9	0.00	0.00	0.00
12,400.0	90.00	0.00	6,850.0	5,083.9	-2,115.1	5,083.9	0.00	0.00	0.00
12,500.0	90.00	0.00	6,850.0	5,183.9	-2,115.1	5,183.9	0.00	0.00	0.00
12,600.0	90.00	0.00	6,850.0	5,283.9	-2,115.1	5,283.9	0.00	0.00	0.00
12,700.0	90.00	0.00	6,850.0	5,383.9	-2,115.1	5,383.9	0.00	0.00	0.00
12,800.0	90.00	0.00	6,850.0	5,483.9	-2,115.1	5,483.9	0.00	0.00	0.00
12,900.0	90.00	0.00	6,850.0	5,583.9	-2,115.1	5,583.9	0.00	0.00	0.00
13,000.0	90.00	0.00	6,850.0	5,683.9	-2,115.1	5,683.9	0.00	0.00	0.00
13,100.0	90.00	0.00	6,850.0	5,783.9	-2,115.1	5,783.9	0.00	0.00	0.00
13,200.0	90.00	0.00	6,850.0	5,883.9	-2,115.1	5,883.9	0.00	0.00	0.00
13,300.0	90.00	0.00	6,850.0	5,983.9	-2,115.1	5,983.9	0.00	0.00	0.00
13,400.0	90.00	0.00	6,850.0	6,083.9	-2,115.1	6,083.9	0.00	0.00	0.00
13,500.0	90.00	0.00	6,850.0	6,183.9	-2,115.1	6,183.9	0.00	0.00	0.00
13,600.0	90.00	0.00	6,850.0	6,283.9	-2,115.1	6,283.9	0.00	0.00	0.00
13,700.0	90.00	0.00	6,850.0	6,383.9	-2,115.1	6,383.9	0.00	0.00	0.00
13,800.0	90.00	0.00	6,850.0	6,483.9	-2,115.1	6,483.9	0.00	0.00	0.00
13,900.0	90.00	0.00	6,850.0	6,583.9	-2,115.1	6,583.9	0.00	0.00	0.00
14,000.0	90.00	0.00	6,850.0	6,683.9	-2,115.1	6,683.9	0.00	0.00	0.00
14,100.0	90.00	0.00	6,850.0	6,783.9	-2,115.1	6,783.9	0.00	0.00	0.00
14,200.0	90.00	0.00	6,850.0	6,883.9	-2,115.1	6,883.9	0.00	0.00	0.00
14,300.0	90.00	0.00	6,850.0	6,983.9	-2,115.1	6,983.9	0.00	0.00	0.00
14,400.0	90.00	0.00	6,850.0	7,083.9	-2,115.1	7,083.9	0.00	0.00	0.00
14,500.0	90.00	0.00	6,850.0	7,183.9	-2,115.1	7,183.9	0.00	0.00	0.00
14,600.0	90.00	0.00	6,850.0	7,283.9	-2,115.0	7,283.9	0.00	0.00	0.00
14,700.0	90.00	0.00	6,850.0	7,383.9	-2,115.0	7,383.9	0.00	0.00	0.00
14,800.0	90.00	0.00	6,850.0	7,483.9	-2,115.0	7,483.9	0.00	0.00	0.00
14,900.0	90.00	0.00	6,850.0	7,583.9	-2,115.0	7,583.9	0.00	0.00	0.00
15,000.0	90.00	0.00	6,850.0	7,683.9	-2,115.0	7,683.9	0.00	0.00	0.00
15,100.0	90.00	0.00	6,850.0	7,783.9	-2,115.0	7,783.9	0.00	0.00	0.00
15,200.0	90.00	0.00	6,850.0	7,883.9	-2,115.0	7,883.9	0.00	0.00	0.00
15,300.0	90.00	0.00	6,850.0	7,983.9	-2,115.0	7,983.9	0.00	0.00	0.00
15,400.0	90.00	0.00	6,850.0	8,083.9	-2,115.0	8,083.9	0.00	0.00	0.00
15,500.0	90.00	0.00	6,850.0	8,183.9	-2,115.0	8,183.9	0.00	0.00	0.00
15,600.0	90.00	0.00	6,850.0	8,283.9	-2,115.0	8,283.9	0.00	0.00	0.00
15,700.0	90.00	0.00	6,850.0	8,383.9	-2,115.0	8,383.9	0.00	0.00	0.00

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Grizzly 0881 4-1H36
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R81W-S12	MD Reference:	KB @ 8146.0usft
Well:	Grizzly 0881 4-1H36	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)
15,800.0	90.00	0.00	6,850.0	8,483.9	-2,115.0	8,483.9	0.00	0.00	0.00
15,900.0	90.00	0.00	6,850.0	8,583.9	-2,115.0	8,583.9	0.00	0.00	0.00
16,000.0	90.00	0.00	6,850.0	8,683.9	-2,115.0	8,683.9	0.00	0.00	0.00
16,100.0	90.00	0.00	6,850.0	8,783.9	-2,115.0	8,783.9	0.00	0.00	0.00
16,200.0	90.00	0.00	6,850.0	8,883.9	-2,115.0	8,883.9	0.00	0.00	0.00
16,300.0	90.00	0.00	6,850.0	8,983.9	-2,115.0	8,983.9	0.00	0.00	0.00
16,400.0	90.00	0.00	6,850.0	9,083.9	-2,115.0	9,083.9	0.00	0.00	0.00
16,500.0	90.00	0.00	6,850.0	9,183.9	-2,115.0	9,183.9	0.00	0.00	0.00
16,600.0	90.00	0.00	6,850.0	9,283.9	-2,115.0	9,283.9	0.00	0.00	0.00
16,700.0	90.00	0.00	6,850.0	9,383.9	-2,115.0	9,383.9	0.00	0.00	0.00
16,800.0	90.00	0.00	6,850.0	9,483.9	-2,115.0	9,483.9	0.00	0.00	0.00
16,900.0	90.00	0.00	6,850.0	9,583.9	-2,115.0	9,583.9	0.00	0.00	0.00
17,000.0	90.00	0.00	6,850.0	9,683.9	-2,115.0	9,683.9	0.00	0.00	0.00
17,100.0	90.00	0.00	6,850.0	9,783.9	-2,115.0	9,783.9	0.00	0.00	0.00
17,200.0	90.00	0.00	6,850.0	9,883.9	-2,115.0	9,883.9	0.00	0.00	0.00
17,300.0	90.00	0.00	6,850.0	9,983.9	-2,115.0	9,983.9	0.00	0.00	0.00
17,400.0	90.00	0.00	6,850.0	10,083.9	-2,115.0	10,083.9	0.00	0.00	0.00
17,500.0	90.00	0.00	6,850.0	10,183.9	-2,114.9	10,183.9	0.00	0.00	0.00
17,600.0	90.00	0.00	6,850.0	10,283.9	-2,114.9	10,283.9	0.00	0.00	0.00
17,700.0	90.00	0.00	6,850.0	10,383.9	-2,114.9	10,383.9	0.00	0.00	0.00
17,800.0	90.00	0.00	6,850.0	10,483.9	-2,114.9	10,483.9	0.00	0.00	0.00
17,900.0	90.00	0.00	6,850.0	10,583.9	-2,114.9	10,583.9	0.00	0.00	0.00
18,000.0	90.00	0.00	6,850.0	10,683.9	-2,114.9	10,683.9	0.00	0.00	0.00
18,100.0	90.00	0.00	6,850.0	10,783.9	-2,114.9	10,783.9	0.00	0.00	0.00
18,200.0	90.00	0.00	6,850.0	10,883.9	-2,114.9	10,883.9	0.00	0.00	0.00
18,300.0	90.00	0.00	6,850.0	10,983.9	-2,114.9	10,983.9	0.00	0.00	0.00
18,400.0	90.00	0.00	6,850.0	11,083.9	-2,114.9	11,083.9	0.00	0.00	0.00
18,500.0	90.00	0.00	6,850.0	11,183.9	-2,114.9	11,183.9	0.00	0.00	0.00
18,600.0	90.00	0.00	6,850.0	11,283.9	-2,114.9	11,283.9	0.00	0.00	0.00
18,624.4	90.00	0.00	6,850.0	11,308.4	-2,114.9	11,308.4	0.00	0.00	0.00
TD at 18624.4									

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
Grizzly 4 - plan hits target center - Point	0.00	0.00	6,850.0	11,308.4	-2,114.9	1,473,396.03	2,740,926.29	40° 37' 44.853 N	106° 26' 0.182 W

SandRidge Energy, Inc.

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Grizzly 0881 4-1H36
Project:	North Park Basin	TVD Reference:	KB @ 8146.0usft
Site:	T7N-R81W-S12	MD Reference:	KB @ 8146.0usft
Well:	Grizzly 0881 4-1H36	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,637.5	6,380.0	Niobrara		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2500	2500	0	0	Start Build 2.00	
3542	3519	-3	-187	Start 2786.3 hold at 3541.5 MD	
6328	6123	-20	-1178	Start DLS 8.00 TFO 1.33	
6817	6489	-22	-1489	Start 150.0 hold at 6817.5 MD	
6967	6564	-22	-1619	Start DLS 10.00 TFO 90.00	
7867	6850	551	-2115	Start 10757.0 hold at 7867.5 MD	
18,624	6850	11,308	-2115	TD at 18624.4	

Checked By: _____ Approved By: _____ Date: _____