

SandRidge Energy

North Park Basin

T6N-R81W-S23

Rabbit Ears 0681 2-23H

Wellbore #1

Plan: Design #1

Standard Survey Report

03 August, 2016

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Rabbit Ears 0681 2-23H
Project:	North Park Basin	TVD Reference:	KB @ 8324.0usft
Site:	T6N-R81W-S23	MD Reference:	KB @ 8324.0usft
Well:	Rabbit Ears 0681 2-23H	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		T6N-R81W-S23			
Site Position:		Northing:	1,418,032.39 usft	Latitude:	40° 28' 37.133 N
From:	Map	Easting:	2,734,606.19 usft	Longitude:	106° 27' 14.423 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.62 °

Well	Rabbit Ears 0681 2-23H					
Well Position	+N/-S	0.0 usft	Northing:	1,418,045.24 usft	Latitude:	40° 28' 37.261 N
	+E/-W	0.0 usft	Easting:	2,734,613.92 usft	Longitude:	106° 27' 14.325 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,308.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	9.91	66.88	53,125

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	180.00	

Survey Tool Program	Date	8/2/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	16,864.9	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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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
Start Build 2.00									
2,900.0	2.00	270.00	2,900.0	0.0	-1.7	0.0	2.00	2.00	0.00
3,000.0	4.00	270.00	2,999.8	0.0	-7.0	0.0	2.00	2.00	0.00
3,100.0	6.00	270.00	3,099.5	0.0	-15.7	0.0	2.00	2.00	0.00
3,200.0	8.00	270.00	3,198.7	0.0	-27.9	0.0	2.00	2.00	0.00
3,300.0	10.00	270.00	3,297.5	0.0	-43.5	0.0	2.00	2.00	0.00
3,400.0	12.00	270.00	3,395.6	0.0	-62.6	0.0	2.00	2.00	0.00
3,437.3	12.75	270.00	3,432.1	0.0	-70.6	0.0	2.00	2.00	0.00
Start 1493.0 hold at 3437.3 MD									
3,500.0	12.75	270.00	3,493.2	0.0	-84.4	0.0	0.00	0.00	0.00
3,600.0	12.75	270.00	3,590.7	0.0	-106.5	0.0	0.00	0.00	0.00
3,700.0	12.75	270.00	3,688.3	0.0	-128.6	0.0	0.00	0.00	0.00
3,800.0	12.75	270.00	3,785.8	0.0	-150.6	0.0	0.00	0.00	0.00
3,900.0	12.75	270.00	3,883.4	0.0	-172.7	0.0	0.00	0.00	0.00
4,000.0	12.75	270.00	3,980.9	0.0	-194.7	0.0	0.00	0.00	0.00
4,100.0	12.75	270.00	4,078.4	0.0	-216.8	0.0	0.00	0.00	0.00
4,200.0	12.75	270.00	4,176.0	0.0	-238.9	0.0	0.00	0.00	0.00
4,300.0	12.75	270.00	4,273.5	0.0	-260.9	0.0	0.00	0.00	0.00
4,400.0	12.75	270.00	4,371.0	0.0	-283.0	0.0	0.00	0.00	0.00
4,500.0	12.75	270.00	4,468.6	0.0	-305.1	0.0	0.00	0.00	0.00
4,600.0	12.75	270.00	4,566.1	0.0	-327.1	0.0	0.00	0.00	0.00
4,700.0	12.75	270.00	4,663.6	0.0	-349.2	0.0	0.00	0.00	0.00
4,800.0	12.75	270.00	4,761.2	0.0	-371.2	0.0	0.00	0.00	0.00
4,900.0	12.75	270.00	4,858.7	0.0	-393.3	0.0	0.00	0.00	0.00
4,930.3	12.75	270.00	4,888.3	0.0	-400.0	0.0	0.00	0.00	0.00

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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)
Start DLS 8.00 TFO -30.33									
4,950.0	14.13	266.74	4,907.4	-0.1	-404.6	0.1	8.00	7.02	-16.56
5,000.0	17.78	260.76	4,955.5	-1.7	-418.2	1.7	8.00	7.30	-11.97
5,050.0	21.55	256.78	5,002.6	-5.0	-434.7	5.0	8.00	7.54	-7.95
5,100.0	25.39	253.95	5,048.4	-10.1	-453.9	10.1	8.00	7.68	-5.66
5,150.0	29.27	251.83	5,092.8	-16.9	-475.8	16.9	8.00	7.76	-4.25
5,200.0	33.17	250.16	5,135.6	-25.3	-500.3	25.3	8.00	7.81	-3.33
5,250.0	37.10	248.81	5,176.5	-35.4	-527.3	35.4	8.00	7.85	-2.70
5,300.0	41.03	247.69	5,215.3	-47.1	-556.5	47.1	8.00	7.87	-2.25
5,333.4	43.67	247.03	5,240.0	-55.8	-577.3	55.8	8.00	7.89	-1.97
Niobrara									
5,350.0	44.98	246.73	5,251.8	-60.3	-588.0	60.3	8.00	7.90	-1.83
5,400.0	48.93	245.89	5,286.0	-75.0	-621.4	75.0	8.00	7.91	-1.67
5,450.0	52.89	245.15	5,317.5	-91.1	-656.7	91.1	8.00	7.92	-1.48
5,500.0	56.86	244.49	5,346.2	-108.5	-693.7	108.5	8.00	7.93	-1.33
5,539.6	60.00	244.00	5,367.0	-123.2	-724.1	123.2	8.00	7.93	-1.23
Start 150.0 hold at 5539.6 MD									
5,600.0	60.00	244.00	5,397.2	-146.1	-771.1	146.1	0.00	0.00	0.00
5,689.6	60.00	244.00	5,442.0	-180.1	-840.9	180.1	0.00	0.00	0.00
Start DLS 10.00 TFO -64.25									
5,700.0	60.45	242.93	5,447.1	-184.1	-848.9	184.1	10.00	4.39	-10.35
5,750.0	62.76	237.89	5,470.9	-205.9	-887.2	205.9	10.00	4.62	-10.08
5,800.0	65.25	233.06	5,492.9	-231.3	-924.2	231.3	10.00	4.96	-9.66
5,850.0	67.88	228.42	5,512.8	-260.4	-959.6	260.4	10.00	5.26	-9.27
5,900.0	70.63	223.96	5,530.5	-292.7	-993.4	292.7	10.00	5.51	-8.92
5,950.0	73.49	219.65	5,545.9	-328.2	-1,025.0	328.2	10.00	5.72	-8.62
6,000.0	76.44	215.47	5,558.8	-366.5	-1,054.5	366.5	10.00	5.89	-8.37
6,050.0	79.46	211.39	5,569.3	-407.3	-1,081.4	407.3	10.00	6.03	-8.16
6,100.0	82.52	207.39	5,577.1	-450.3	-1,105.6	450.3	10.00	6.13	-8.00
6,150.0	85.62	203.44	5,582.3	-495.2	-1,126.9	495.2	10.00	6.20	-7.89
6,200.0	88.75	199.53	5,584.7	-541.7	-1,145.2	541.7	10.00	6.24	-7.82
6,220.0	90.00	197.97	5,585.0	-560.6	-1,151.7	560.6	10.00	6.26	-7.80
Start 10644.8 hold at 6220.0 MD									
6,300.0	90.00	197.97	5,585.0	-636.7	-1,176.3	636.7	0.00	0.00	0.00
6,400.0	90.00	197.97	5,585.0	-731.8	-1,207.2	731.8	0.00	0.00	0.00
6,500.0	90.00	197.97	5,585.0	-826.9	-1,238.0	826.9	0.00	0.00	0.00
6,600.0	90.00	197.97	5,585.0	-922.1	-1,268.9	922.1	0.00	0.00	0.00
6,700.0	90.00	197.97	5,585.0	-1,017.2	-1,299.8	1,017.2	0.00	0.00	0.00
6,800.0	90.00	197.97	5,585.0	-1,112.3	-1,330.6	1,112.3	0.00	0.00	0.00
6,900.0	90.00	197.97	5,585.0	-1,207.4	-1,361.5	1,207.4	0.00	0.00	0.00
7,000.0	90.00	197.97	5,585.0	-1,302.5	-1,392.3	1,302.5	0.00	0.00	0.00
7,100.0	90.00	197.97	5,585.0	-1,397.7	-1,423.2	1,397.7	0.00	0.00	0.00
7,200.0	90.00	197.97	5,585.0	-1,492.8	-1,454.0	1,492.8	0.00	0.00	0.00
7,300.0	90.00	197.97	5,585.0	-1,587.9	-1,484.9	1,587.9	0.00	0.00	0.00

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Well:	Rabbit Ears 0681 2-23H	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)
7,400.0	90.00	197.97	5,585.0	-1,683.0	-1,515.7	1,683.0	0.00	0.00	0.00
7,500.0	90.00	197.97	5,585.0	-1,778.1	-1,546.6	1,778.1	0.00	0.00	0.00
7,600.0	90.00	197.97	5,585.0	-1,873.3	-1,577.4	1,873.3	0.00	0.00	0.00
7,700.0	90.00	197.97	5,585.0	-1,968.4	-1,608.3	1,968.4	0.00	0.00	0.00
7,800.0	90.00	197.97	5,585.0	-2,063.5	-1,639.2	2,063.5	0.00	0.00	0.00
7,900.0	90.00	197.97	5,585.0	-2,158.6	-1,670.0	2,158.6	0.00	0.00	0.00
8,000.0	90.00	197.97	5,585.0	-2,253.7	-1,700.9	2,253.7	0.00	0.00	0.00
8,100.0	90.00	197.97	5,585.0	-2,348.9	-1,731.7	2,348.9	0.00	0.00	0.00
8,200.0	90.00	197.97	5,585.0	-2,444.0	-1,762.6	2,444.0	0.00	0.00	0.00
8,300.0	90.00	197.97	5,585.0	-2,539.1	-1,793.4	2,539.1	0.00	0.00	0.00
8,400.0	90.00	197.97	5,585.0	-2,634.2	-1,824.3	2,634.2	0.00	0.00	0.00
8,500.0	90.00	197.97	5,585.0	-2,729.4	-1,855.1	2,729.4	0.00	0.00	0.00
8,600.0	90.00	197.97	5,585.0	-2,824.5	-1,886.0	2,824.5	0.00	0.00	0.00
8,700.0	90.00	197.97	5,585.0	-2,919.6	-1,916.8	2,919.6	0.00	0.00	0.00
8,800.0	90.00	197.97	5,585.0	-3,014.7	-1,947.7	3,014.7	0.00	0.00	0.00
8,900.0	90.00	197.97	5,585.0	-3,109.8	-1,978.6	3,109.8	0.00	0.00	0.00
9,000.0	90.00	197.97	5,585.0	-3,205.0	-2,009.4	3,205.0	0.00	0.00	0.00
9,100.0	90.00	197.97	5,585.0	-3,300.1	-2,040.3	3,300.1	0.00	0.00	0.00
9,200.0	90.00	197.97	5,585.0	-3,395.2	-2,071.1	3,395.2	0.00	0.00	0.00
9,300.0	90.00	197.97	5,585.0	-3,490.3	-2,102.0	3,490.3	0.00	0.00	0.00
9,400.0	90.00	197.97	5,585.0	-3,585.4	-2,132.8	3,585.4	0.00	0.00	0.00
9,500.0	90.00	197.97	5,585.0	-3,680.6	-2,163.7	3,680.6	0.00	0.00	0.00
9,600.0	90.00	197.97	5,585.0	-3,775.7	-2,194.5	3,775.7	0.00	0.00	0.00
9,700.0	90.00	197.97	5,585.0	-3,870.8	-2,225.4	3,870.8	0.00	0.00	0.00
9,800.0	90.00	197.97	5,585.0	-3,965.9	-2,256.2	3,965.9	0.00	0.00	0.00
9,900.0	90.00	197.97	5,585.0	-4,061.0	-2,287.1	4,061.0	0.00	0.00	0.00
10,000.0	90.00	197.97	5,585.0	-4,156.2	-2,318.0	4,156.2	0.00	0.00	0.00
10,100.0	90.00	197.97	5,585.0	-4,251.3	-2,348.8	4,251.3	0.00	0.00	0.00
10,200.0	90.00	197.97	5,585.0	-4,346.4	-2,379.7	4,346.4	0.00	0.00	0.00
10,300.0	90.00	197.97	5,585.0	-4,441.5	-2,410.5	4,441.5	0.00	0.00	0.00
10,400.0	90.00	197.97	5,585.0	-4,536.7	-2,441.4	4,536.7	0.00	0.00	0.00
10,500.0	90.00	197.97	5,585.0	-4,631.8	-2,472.2	4,631.8	0.00	0.00	0.00
10,600.0	90.00	197.97	5,585.0	-4,726.9	-2,503.1	4,726.9	0.00	0.00	0.00
10,700.0	90.00	197.97	5,585.0	-4,822.0	-2,533.9	4,822.0	0.00	0.00	0.00
10,800.0	90.00	197.97	5,585.0	-4,917.1	-2,564.8	4,917.1	0.00	0.00	0.00
10,900.0	90.00	197.97	5,585.0	-5,012.3	-2,595.6	5,012.3	0.00	0.00	0.00
11,000.0	90.00	197.97	5,585.0	-5,107.4	-2,626.5	5,107.4	0.00	0.00	0.00
11,100.0	90.00	197.97	5,585.0	-5,202.5	-2,657.4	5,202.5	0.00	0.00	0.00
11,200.0	90.00	197.97	5,585.0	-5,297.6	-2,688.2	5,297.6	0.00	0.00	0.00
11,300.0	90.00	197.97	5,585.0	-5,392.7	-2,719.1	5,392.7	0.00	0.00	0.00
11,400.0	90.00	197.97	5,585.0	-5,487.9	-2,749.9	5,487.9	0.00	0.00	0.00
11,500.0	90.00	197.97	5,585.0	-5,583.0	-2,780.8	5,583.0	0.00	0.00	0.00
11,600.0	90.00	197.97	5,585.0	-5,678.1	-2,811.6	5,678.1	0.00	0.00	0.00
11,700.0	90.00	197.97	5,585.0	-5,773.2	-2,842.5	5,773.2	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Rabbit Ears 0681 2-23H
Project:	North Park Basin	TVD Reference:	KB @ 8324.0usft
Site:	T6N-R81W-S23	MD Reference:	KB @ 8324.0usft
Well:	Rabbit Ears 0681 2-23H	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)
11,800.0	90.00	197.97	5,585.0	-5,868.3	-2,873.3	5,868.3	0.00	0.00	0.00
11,900.0	90.00	197.97	5,585.0	-5,963.5	-2,904.2	5,963.5	0.00	0.00	0.00
12,000.0	90.00	197.97	5,585.0	-6,058.6	-2,935.0	6,058.6	0.00	0.00	0.00
12,100.0	90.00	197.97	5,585.0	-6,153.7	-2,965.9	6,153.7	0.00	0.00	0.00
12,200.0	90.00	197.97	5,585.0	-6,248.8	-2,996.8	6,248.8	0.00	0.00	0.00
12,300.0	90.00	197.97	5,585.0	-6,343.9	-3,027.6	6,343.9	0.00	0.00	0.00
12,400.0	90.00	197.97	5,585.0	-6,439.1	-3,058.5	6,439.1	0.00	0.00	0.00
12,500.0	90.00	197.97	5,585.0	-6,534.2	-3,089.3	6,534.2	0.00	0.00	0.00
12,600.0	90.00	197.97	5,585.0	-6,629.3	-3,120.2	6,629.3	0.00	0.00	0.00
12,700.0	90.00	197.97	5,585.0	-6,724.4	-3,151.0	6,724.4	0.00	0.00	0.00
12,800.0	90.00	197.97	5,585.0	-6,819.6	-3,181.9	6,819.6	0.00	0.00	0.00
12,900.0	90.00	197.97	5,585.0	-6,914.7	-3,212.7	6,914.7	0.00	0.00	0.00
13,000.0	90.00	197.97	5,585.0	-7,009.8	-3,243.6	7,009.8	0.00	0.00	0.00
13,100.0	90.00	197.97	5,585.0	-7,104.9	-3,274.4	7,104.9	0.00	0.00	0.00
13,200.0	90.00	197.97	5,585.0	-7,200.0	-3,305.3	7,200.0	0.00	0.00	0.00
13,300.0	90.00	197.97	5,585.0	-7,295.2	-3,336.2	7,295.2	0.00	0.00	0.00
13,400.0	90.00	197.97	5,585.0	-7,390.3	-3,367.0	7,390.3	0.00	0.00	0.00
13,500.0	90.00	197.97	5,585.0	-7,485.4	-3,397.9	7,485.4	0.00	0.00	0.00
13,600.0	90.00	197.97	5,585.0	-7,580.5	-3,428.7	7,580.5	0.00	0.00	0.00
13,700.0	90.00	197.97	5,585.0	-7,675.6	-3,459.6	7,675.6	0.00	0.00	0.00
13,800.0	90.00	197.97	5,585.0	-7,770.8	-3,490.4	7,770.8	0.00	0.00	0.00
13,900.0	90.00	197.97	5,585.0	-7,865.9	-3,521.3	7,865.9	0.00	0.00	0.00
14,000.0	90.00	197.97	5,585.0	-7,961.0	-3,552.1	7,961.0	0.00	0.00	0.00
14,100.0	90.00	197.97	5,585.0	-8,056.1	-3,583.0	8,056.1	0.00	0.00	0.00
14,200.0	90.00	197.97	5,585.0	-8,151.2	-3,613.8	8,151.2	0.00	0.00	0.00
14,300.0	90.00	197.97	5,585.0	-8,246.4	-3,644.7	8,246.4	0.00	0.00	0.00
14,400.0	90.00	197.97	5,585.0	-8,341.5	-3,675.6	8,341.5	0.00	0.00	0.00
14,500.0	90.00	197.97	5,585.0	-8,436.6	-3,706.4	8,436.6	0.00	0.00	0.00
14,600.0	90.00	197.97	5,585.0	-8,531.7	-3,737.3	8,531.7	0.00	0.00	0.00
14,700.0	90.00	197.97	5,585.0	-8,626.9	-3,768.1	8,626.9	0.00	0.00	0.00
14,800.0	90.00	197.97	5,585.0	-8,722.0	-3,799.0	8,722.0	0.00	0.00	0.00
14,900.0	90.00	197.97	5,585.0	-8,817.1	-3,829.8	8,817.1	0.00	0.00	0.00
15,000.0	90.00	197.97	5,585.0	-8,912.2	-3,860.7	8,912.2	0.00	0.00	0.00
15,100.0	90.00	197.97	5,585.0	-9,007.3	-3,891.5	9,007.3	0.00	0.00	0.00
15,200.0	90.00	197.97	5,585.0	-9,102.5	-3,922.4	9,102.5	0.00	0.00	0.00
15,300.0	90.00	197.97	5,585.0	-9,197.6	-3,953.2	9,197.6	0.00	0.00	0.00
15,400.0	90.00	197.97	5,585.0	-9,292.7	-3,984.1	9,292.7	0.00	0.00	0.00
15,500.0	90.00	197.97	5,585.0	-9,387.8	-4,015.0	9,387.8	0.00	0.00	0.00
15,600.0	90.00	197.97	5,585.0	-9,482.9	-4,045.8	9,482.9	0.00	0.00	0.00
15,700.0	90.00	197.97	5,585.0	-9,578.1	-4,076.7	9,578.1	0.00	0.00	0.00
15,800.0	90.00	197.97	5,585.0	-9,673.2	-4,107.5	9,673.2	0.00	0.00	0.00
15,900.0	90.00	197.97	5,585.0	-9,768.3	-4,138.4	9,768.3	0.00	0.00	0.00
16,000.0	90.00	197.97	5,585.0	-9,863.4	-4,169.2	9,863.4	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Rabbit Ears 0681 2-23H
Project:	North Park Basin	TVD Reference:	KB @ 8324.0usft
Site:	T6N-R81W-S23	MD Reference:	KB @ 8324.0usft
Well:	Rabbit Ears 0681 2-23H	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)
16,100.0	90.00	197.97	5,585.0	-9,958.5	-4,200.1	9,958.5	0.00	0.00	0.00
16,200.0	90.00	197.97	5,585.0	-10,053.7	-4,230.9	10,053.7	0.00	0.00	0.00
16,300.0	90.00	197.97	5,585.0	-10,148.8	-4,261.8	10,148.8	0.00	0.00	0.00
16,400.0	90.00	197.97	5,585.0	-10,243.9	-4,292.6	10,243.9	0.00	0.00	0.00
16,500.0	90.00	197.97	5,585.0	-10,339.0	-4,323.5	10,339.0	0.00	0.00	0.00
16,600.0	90.00	197.97	5,585.0	-10,434.1	-4,354.4	10,434.1	0.00	0.00	0.00
16,700.0	90.00	197.97	5,585.0	-10,529.3	-4,385.2	10,529.3	0.00	0.00	0.00
16,800.0	90.00	197.97	5,585.0	-10,624.4	-4,416.1	10,624.4	0.00	0.00	0.00
16,864.9	90.00	197.97	5,585.0	-10,686.1	-4,436.1	10,686.1	0.00	0.00	0.00
TD at 16864.9									

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									
Rabbit Ears 2	0.00	360.00	5,585.0	-10,686.1	-4,436.1	1,407,359.14	2,730,177.84	40° 26' 51.193 N	106° 28' 10.215 W
- plan hits target center									
- Point									
Rabbit Ears 2 LP	0.00	360.00	5,585.0	-700.0	-1,191.4	1,417,345.24	2,733,422.52	40° 28' 30.217 N	106° 27' 29.643 W
- plan misses target center by 5.2usft at 6364.9usft MD (5585.0 TVD, -698.4 N, -1196.3 E)									
- Point									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,333.4	5,240.0	Niobrara		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2800	2800	0	0	Start Build 2.00
3437	3432	0	-71	Start 1493.0 hold at 3437.3 MD
4930	4888	0	-400	Start DLS 8.00 TFO -30.33
5540	5367	-123	-724	Start 150.0 hold at 5539.6 MD
5690	5442	-180	-841	Start DLS 10.00 TFO -64.25
6220	5585	-561	-1152	Start 10644.8 hold at 6220.0 MD
16,865	5585	-10,686	-4436	TD at 16864.9

Checked By: _____ Approved By: _____ Date: _____