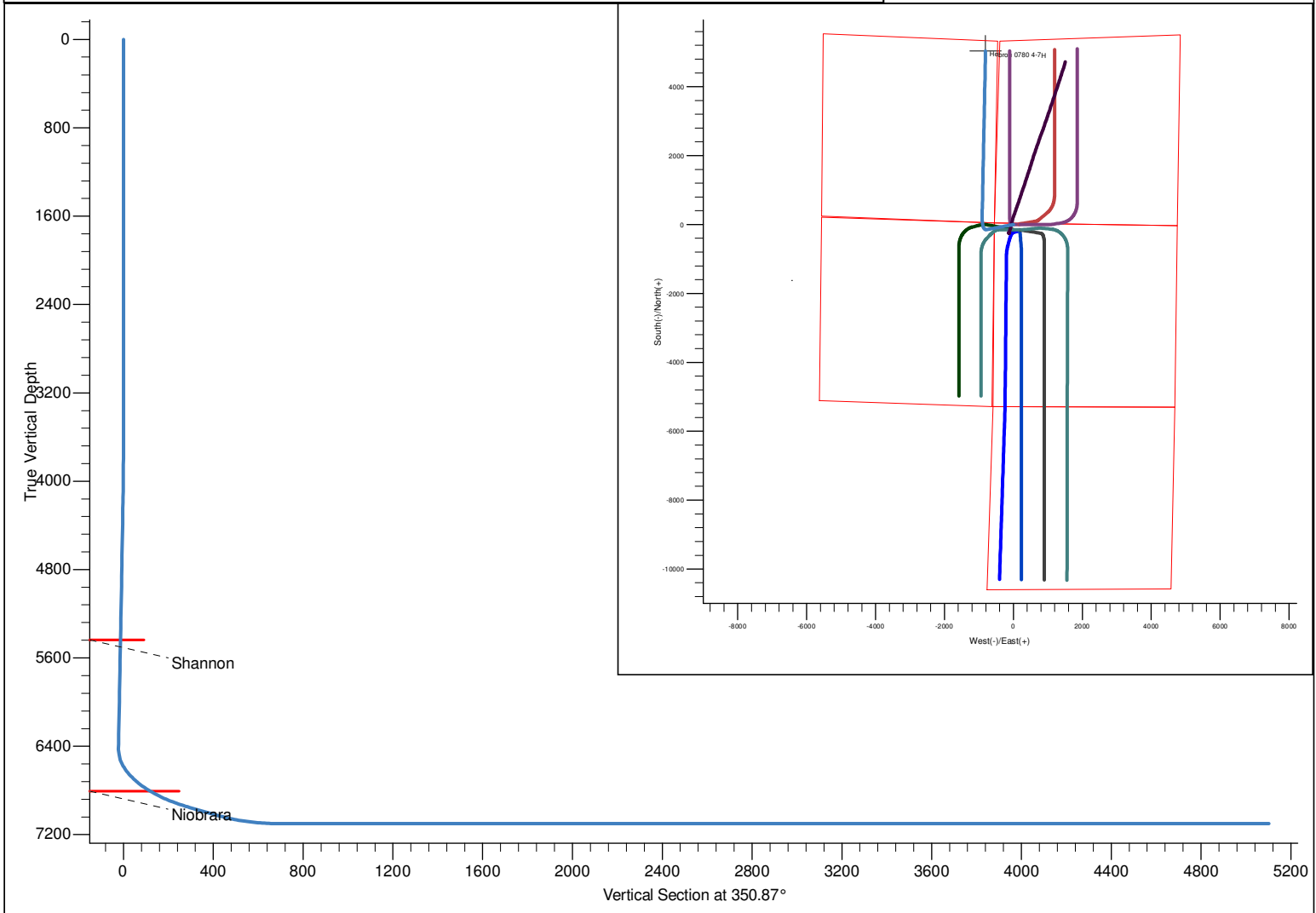


PROJECT DETAILS: North Park Basin				<div><div><div>G</div><div>T</div><div>M</div></div><div></div></div> <div>Azimuths to Grid North True North: 0.58° Magnetic North: 10.48° Magnetic Field Strength: 53189.0snT Dip Angle: 66.97° Date: 12/31/2009 Model: IGRF200510</div>	
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone System Datum: Mean Sea Level					
FORMATION TOP DETAILS				CASING DETAILS	
<div><div>TVDPathMDPath</div><div>5436.05505.6</div><div>6806.06968.6</div></div> <div><div>Formation</div><div>Shannon</div><div>Niobrara</div></div> <div><div>DipAngleDipDir</div><div>0.00</div><div>0.00</div></div>				No casing data is available	
DESIGN DETAILS: Design #1				<div>Project: North Park Basin</div> <div>Site: T7N-R80W-S17</div> <div>Well: Hebron 0780 4-7H</div> <div>Wellbore: Wellbore #1</div> <div>Design: Design #1</div>	
0° Vertical Section coordinates					
<div><div>Type</div><div>TD</div></div> <div><div>TargetAzimuth</div><div>350.87</div></div> <div><div>Origin</div><div>Slot</div></div> <div><div>TypeN/S</div><div>0.0</div></div> <div><div>E/W From</div><div>0.0</div></div> <div><div>TVD</div><div>0.0</div></div>					



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	3500.0	0.00	0.00	3500.0	0.0	0.0	0.00	0.00	0.0		
3	4406.0	18.12	259.28	4391.0	-26.4	-139.6	2.00	259.28	-4.0		
4	6541.3	18.12	259.28	6420.4	-150.0	-792.1	0.00	0.00	-22.5		
5	7189.8	60.00	360.00	6948.2	144.1	-903.3	10.00	109.94	285.6		
6	7339.8	60.00	360.00	7023.2	274.0	-903.3	0.00	0.00	413.8		
7	7640.0	90.00	1.16	7100.0	560.7	-900.2	10.00	2.33	696.3	Hebron 4-7H Target	
8	12117.8	90.00	1.16	7100.0	5037.6	-809.3	0.00	0.00	5102.2	Hebron 4-7H Target	

SandRidge Energy

North Park Basin

T7N-R80W-S17

Hebron 0780 4-7H

Wellbore #1

Plan: Design #1

Standard Survey Report

16 December, 2015

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Well:	Hebron 0780 4-7H	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-S17				
Site Position:		Northing:	1,456,885.51 usft	Latitude:	40° 35' 2.501 N
From:	Lat/Long	Easting:	2,748,625.91 usft	Longitude:	106° 24' 18.140 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.58 °

Well	Hebron 0780 4-7H					
Well Position	+N/-S	0.0 usft	Northing:	1,457,115.24 usft	Latitude:	40° 35' 4.769 N
	+E/-W	0.0 usft	Easting:	2,748,603.51 usft	Longitude:	106° 24' 18.461 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,156.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	9.89	66.97	53,189

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	350.87		

Survey Tool Program	Date	12/16/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,117.4	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	

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Well:	Hebron 0780 4-7H	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
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	2.00	259.28	3,600.0	-0.3	-1.7	0.0	2.00	2.00	0.00
3,700.0	4.00	259.28	3,699.8	-1.3	-6.9	-0.2	2.00	2.00	0.00
3,800.0	6.00	259.28	3,799.5	-2.9	-15.4	-0.4	2.00	2.00	0.00
3,900.0	8.00	259.28	3,898.7	-5.2	-27.4	-0.8	2.00	2.00	0.00
4,000.0	10.00	259.28	3,997.5	-8.1	-42.8	-1.2	2.00	2.00	0.00
4,100.0	12.00	259.28	4,095.6	-11.6	-61.5	-1.7	2.00	2.00	0.00
4,200.0	14.00	259.28	4,193.1	-15.8	-83.6	-2.4	2.00	2.00	0.00
4,300.0	16.00	259.28	4,289.6	-20.6	-109.0	-3.1	2.00	2.00	0.00
4,406.0	18.12	259.28	4,391.0	-26.4	-139.6	-4.0	2.00	2.00	0.00
4,500.0	18.12	259.28	4,480.3	-31.9	-168.3	-4.8	0.00	0.00	0.00
4,600.0	18.12	259.28	4,575.4	-37.7	-198.9	-5.6	0.00	0.00	0.00
4,700.0	18.12	259.28	4,670.4	-43.4	-229.4	-6.5	0.00	0.00	0.00
4,800.0	18.12	259.28	4,765.4	-49.2	-260.0	-7.4	0.00	0.00	0.00
4,900.0	18.12	259.28	4,860.5	-55.0	-290.5	-8.2	0.00	0.00	0.00
5,000.0	18.12	259.28	4,955.5	-60.8	-321.1	-9.1	0.00	0.00	0.00
5,100.0	18.12	259.28	5,050.6	-66.6	-351.7	-10.0	0.00	0.00	0.00
5,200.0	18.12	259.28	5,145.6	-72.4	-382.2	-10.8	0.00	0.00	0.00
5,300.0	18.12	259.28	5,240.6	-78.2	-412.8	-11.7	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Well:	Hebron 0780 4-7H	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)
5,400.0	18.12	259.28	5,335.7	-84.0	-443.3	-12.6	0.00	0.00	0.00
5,500.0	18.12	259.28	5,430.7	-89.7	-473.9	-13.4	0.00	0.00	0.00
5,600.0	18.12	259.28	5,525.8	-95.5	-504.5	-14.3	0.00	0.00	0.00
5,700.0	18.12	259.28	5,620.8	-101.3	-535.0	-15.2	0.00	0.00	0.00
5,800.0	18.12	259.28	5,715.8	-107.1	-565.6	-16.0	0.00	0.00	0.00
5,900.0	18.12	259.28	5,810.9	-112.9	-596.1	-16.9	0.00	0.00	0.00
6,000.0	18.12	259.28	5,905.9	-118.7	-626.7	-17.8	0.00	0.00	0.00
6,100.0	18.12	259.28	6,001.0	-124.5	-657.2	-18.6	0.00	0.00	0.00
6,200.0	18.12	259.28	6,096.0	-130.2	-687.8	-19.5	0.00	0.00	0.00
6,300.0	18.12	259.28	6,191.0	-136.0	-718.4	-20.4	0.00	0.00	0.00
6,400.0	18.12	259.28	6,286.1	-141.8	-748.9	-21.2	0.00	0.00	0.00
6,500.0	18.12	259.28	6,381.1	-147.6	-779.5	-22.1	0.00	0.00	0.00
6,541.3	18.12	259.28	6,420.4	-150.0	-792.1	-22.5	0.00	0.00	0.00
6,550.0	17.84	261.94	6,428.7	-150.4	-794.7	-22.5	10.00	-3.20	30.69
6,600.0	17.01	278.46	6,476.4	-150.4	-809.6	-20.1	10.00	-1.67	33.04
6,650.0	17.57	295.23	6,524.2	-146.1	-823.6	-13.6	10.00	1.12	33.55
6,700.0	19.41	309.95	6,571.6	-137.6	-836.8	-3.1	10.00	3.67	29.44
6,750.0	22.20	321.66	6,618.4	-124.8	-849.1	11.4	10.00	5.60	23.42
6,800.0	25.65	330.62	6,664.1	-108.0	-860.2	29.8	10.00	6.89	17.92
6,850.0	29.52	337.49	6,708.4	-87.2	-870.3	52.0	10.00	7.74	13.72
6,900.0	33.66	342.84	6,751.0	-62.5	-879.1	77.7	10.00	8.29	10.71
6,950.0	37.99	347.12	6,791.5	-34.3	-886.6	106.8	10.00	8.66	8.57
7,000.0	42.45	350.64	6,829.7	-2.6	-892.8	139.1	10.00	8.91	7.03
7,050.0	46.99	353.60	6,865.2	32.2	-897.6	174.2	10.00	9.09	5.92
7,100.0	51.61	356.15	6,897.8	70.0	-900.9	212.0	10.00	9.22	5.10
7,150.0	56.27	358.39	6,927.2	110.3	-902.8	252.2	10.00	9.32	4.48
7,189.8	60.00	360.00	6,948.2	144.1	-903.3	285.6	10.00	9.39	4.06
7,200.0	60.00	360.00	6,953.3	153.0	-903.3	294.3	0.00	0.00	0.00
7,300.0	60.00	360.00	7,003.3	239.6	-903.3	379.8	0.00	0.00	0.00
7,339.8	60.00	360.00	7,023.2	274.0	-903.3	413.8	0.00	0.00	0.00
7,350.0	61.02	0.05	7,028.3	282.9	-903.3	422.6	10.00	9.99	0.46
7,400.0	66.02	0.27	7,050.6	327.7	-903.2	466.8	10.00	9.99	0.44
7,450.0	71.02	0.47	7,068.9	374.2	-902.9	512.6	10.00	9.99	0.41
7,500.0	76.01	0.66	7,083.0	422.1	-902.4	559.9	10.00	9.99	0.38
7,550.0	81.01	0.84	7,093.0	471.1	-901.8	608.1	10.00	9.99	0.37
7,600.0	86.01	1.02	7,098.7	520.7	-900.9	657.0	10.00	9.99	0.36
7,640.0	90.00	1.16	7,100.0	560.7	-900.2	696.3	10.00	9.99	0.35
7,700.0	90.00	1.16	7,100.0	620.7	-899.0	755.4	0.00	0.00	0.00
7,800.0	90.00	1.16	7,100.0	720.7	-896.9	853.8	0.00	0.00	0.00
7,900.0	90.00	1.16	7,100.0	820.6	-894.9	952.2	0.00	0.00	0.00
8,000.0	90.00	1.16	7,100.0	920.6	-892.9	1,050.6	0.00	0.00	0.00
8,100.0	90.00	1.16	7,100.0	1,020.6	-890.8	1,149.0	0.00	0.00	0.00
8,200.0	90.00	1.16	7,100.0	1,120.6	-888.8	1,247.4	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Well:	Hebron 0780 4-7H	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)
8,300.0	90.00	1.16	7,100.0	1,220.6	-886.8	1,345.8	0.00	0.00	0.00
8,400.0	90.00	1.16	7,100.0	1,320.5	-884.8	1,444.2	0.00	0.00	0.00
8,500.0	90.00	1.16	7,100.0	1,420.5	-882.7	1,542.5	0.00	0.00	0.00
8,600.0	90.00	1.16	7,100.0	1,520.5	-880.7	1,640.9	0.00	0.00	0.00
8,700.0	90.00	1.16	7,100.0	1,620.5	-878.7	1,739.3	0.00	0.00	0.00
8,800.0	90.00	1.16	7,100.0	1,720.5	-876.6	1,837.7	0.00	0.00	0.00
8,900.0	90.00	1.16	7,100.0	1,820.4	-874.6	1,936.1	0.00	0.00	0.00
9,000.0	90.00	1.16	7,100.0	1,920.4	-872.6	2,034.5	0.00	0.00	0.00
9,100.0	90.00	1.16	7,100.0	2,020.4	-870.5	2,132.9	0.00	0.00	0.00
9,200.0	90.00	1.16	7,100.0	2,120.4	-868.5	2,231.3	0.00	0.00	0.00
9,300.0	90.00	1.16	7,100.0	2,220.3	-866.5	2,329.7	0.00	0.00	0.00
9,400.0	90.00	1.16	7,100.0	2,320.3	-864.5	2,428.1	0.00	0.00	0.00
9,500.0	90.00	1.16	7,100.0	2,420.3	-862.4	2,526.5	0.00	0.00	0.00
9,600.0	90.00	1.16	7,100.0	2,520.3	-860.4	2,624.9	0.00	0.00	0.00
9,700.0	90.00	1.16	7,100.0	2,620.3	-858.4	2,723.2	0.00	0.00	0.00
9,800.0	90.00	1.16	7,100.0	2,720.2	-856.3	2,821.6	0.00	0.00	0.00
9,900.0	90.00	1.16	7,100.0	2,820.2	-854.3	2,920.0	0.00	0.00	0.00
10,000.0	90.00	1.16	7,100.0	2,920.2	-852.3	3,018.4	0.00	0.00	0.00
10,100.0	90.00	1.16	7,100.0	3,020.2	-850.2	3,116.8	0.00	0.00	0.00
10,200.0	90.00	1.16	7,100.0	3,120.2	-848.2	3,215.2	0.00	0.00	0.00
10,300.0	90.00	1.16	7,100.0	3,220.1	-846.2	3,313.6	0.00	0.00	0.00
10,400.0	90.00	1.16	7,100.0	3,320.1	-844.2	3,412.0	0.00	0.00	0.00
10,500.0	90.00	1.16	7,100.0	3,420.1	-842.1	3,510.4	0.00	0.00	0.00
10,600.0	90.00	1.16	7,100.0	3,520.1	-840.1	3,608.8	0.00	0.00	0.00
10,700.0	90.00	1.16	7,100.0	3,620.1	-838.1	3,707.2	0.00	0.00	0.00
10,800.0	90.00	1.16	7,100.0	3,720.0	-836.0	3,805.6	0.00	0.00	0.00
10,900.0	90.00	1.16	7,100.0	3,820.0	-834.0	3,903.9	0.00	0.00	0.00
11,000.0	90.00	1.16	7,100.0	3,920.0	-832.0	4,002.3	0.00	0.00	0.00
11,100.0	90.00	1.16	7,100.0	4,020.0	-829.9	4,100.7	0.00	0.00	0.00
11,200.0	90.00	1.16	7,100.0	4,120.0	-827.9	4,199.1	0.00	0.00	0.00
11,300.0	90.00	1.16	7,100.0	4,219.9	-825.9	4,297.5	0.00	0.00	0.00
11,400.0	90.00	1.16	7,100.0	4,319.9	-823.9	4,395.9	0.00	0.00	0.00
11,500.0	90.00	1.16	7,100.0	4,419.9	-821.8	4,494.3	0.00	0.00	0.00
11,600.0	90.00	1.16	7,100.0	4,519.9	-819.8	4,592.7	0.00	0.00	0.00
11,700.0	90.00	1.16	7,100.0	4,619.9	-817.8	4,691.1	0.00	0.00	0.00
11,800.0	90.00	1.16	7,100.0	4,719.8	-815.7	4,789.5	0.00	0.00	0.00
11,900.0	90.00	1.16	7,100.0	4,819.8	-813.7	4,887.9	0.00	0.00	0.00
12,000.0	90.00	1.16	7,100.0	4,919.8	-811.7	4,986.3	0.00	0.00	0.00
12,100.0	90.00	1.16	7,100.0	5,019.8	-809.6	5,084.6	0.00	0.00	0.00
12,117.8	90.00	1.16	7,100.0	5,037.6	-809.3	5,102.2	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Hebron 0780 4-7H
Project:	North Park Basin	TVD Reference:	WELL @ 8175.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8175.0usft (Original Well Elev)
Well:	Hebron 0780 4-7H	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									
Hebron 4-7H Target	0.00	0.00	7,100.0	5,037.6	-809.3	1,462,152.81	2,747,794.22	40° 35' 54.463 N	106° 24' 29.618 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,505.6	5,433.0	Shannon		0.00		
6,968.6	6,803.0	Niobrara		0.00		

Checked By: _____ Approved By: _____ Date: _____