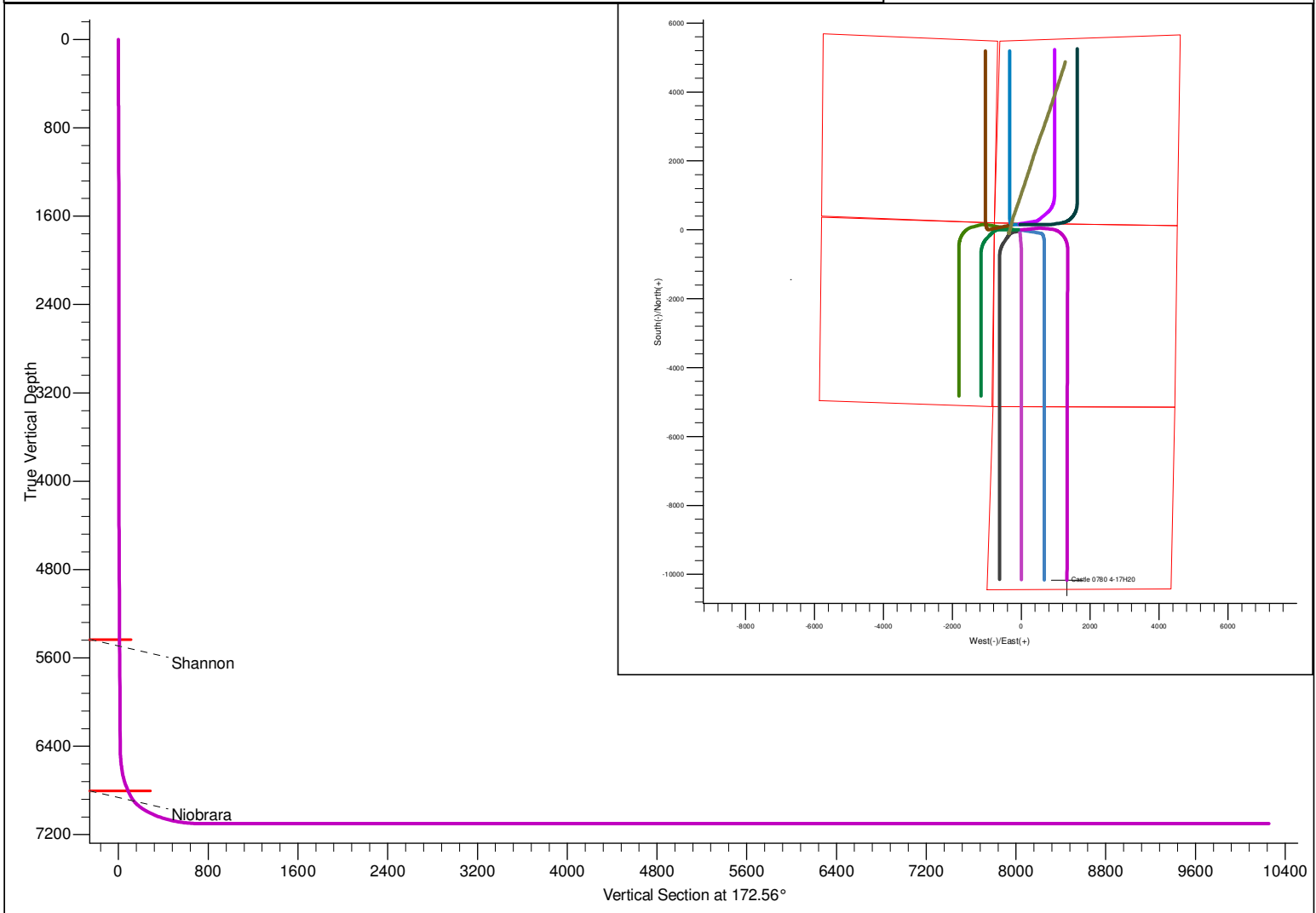


PROJECT DETAILS: North Park Basin										<div><div><div><div></div><div>G</div></div><div><div>T</div><div>M</div></div></div></div>	Azimuths to Grid North True North: 0.58° Magnetic North: 10.48°																												
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone System Datum: Mean Sea Level											Magnetic Field Strength: 53188.9snT Dip Angle: 66.97° Date: 12/31/2009 Model: IGRF200510																												
FORMATION TOP DETAILS											CASING DETAILS																												
TVDPathMDPath 5433.0 5459.3 6803.0 6993.6										Formation Shannon Niobrara										DipAngleDipDir 0.00 0.00										No casing data is available									
DESIGN DETAILS: Design #1																																							
0' Vertical Section coordinates																				Project: North Park Basin Site: T7N-R80W-S17 Well: Castle 0780 4-17H20 Wellbore: Wellbore #1 Design: Design #1																			
Type TargetAzimuth Origin TypeN/S E/W From TVD TD 172.56 Slot 0.0 0.0 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	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0		
3	594.9	1.90	90.00	594.9	0.0	1.6	2.00	90.00	0.2		
4	1405.6	1.90	90.00	1405.1	0.0	28.4	0.00	0.00	3.7		
5	1500.5	0.00	0.00	1500.0	0.0	30.0	2.00	180.00	3.9		
6	4000.0	0.00	0.00	3999.5	0.0	30.0	0.00	0.00	3.9		
7	4642.4	12.85	83.93	4636.6	7.6	101.3	2.00	83.93	5.6		
8	6445.4	12.85	83.93	6394.4	50.0	500.0	0.00	0.00	15.2		
9	6920.7	60.00	96.90	6766.6	29.7	772.7	10.00	15.28	70.7		
10	7070.7	60.00	96.90	6841.6	14.1	901.7	0.00	0.00	102.8		
11	7911.9	90.00	180.10	7100.0	-556.6	1345.2	10.00	86.59	726.2	Castle 4-17H20	
12	17522.7	90.00	180.10	7100.0	-10167.4	1328.2	0.00	0.00	10253.8	Castle 4-17H20	

SandRidge Energy

North Park Basin

T7N-R80W-S17

Castle 0780 4-17H20

Wellbore #1

Plan: Design #1

Standard Survey Report

14 December, 2015

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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	Castle 0780 4-17H20					
Well Position	+N/-S	0.0 usft	Northing:	1,456,962.12 usft	Latitude:	40° 35' 3.279 N
	+E/-W	0.0 usft	Easting:	2,748,830.86 usft	Longitude:	106° 24' 15.494 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	172.56	

Survey Tool Program	Date	12/11/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,522.2	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	
25.0	0.00	0.00	25.0	0.0	0.0	0.0	0.00	0.00	0.00	
50.0	0.00	0.00	50.0	0.0	0.0	0.0	0.00	0.00	0.00	
75.0	0.00	0.00	75.0	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	
125.0	0.00	0.00	125.0	0.0	0.0	0.0	0.00	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	0.00	
175.0	0.00	0.00	175.0	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	
225.0	0.00	0.00	225.0	0.0	0.0	0.0	0.00	0.00	0.00	

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	0.00
275.0	0.00	0.00	275.0	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
325.0	0.00	0.00	325.0	0.0	0.0	0.0	0.00	0.00	0.00
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
375.0	0.00	0.00	375.0	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
425.0	0.00	0.00	425.0	0.0	0.0	0.0	0.00	0.00	0.00
450.0	0.00	0.00	450.0	0.0	0.0	0.0	0.00	0.00	0.00
475.0	0.00	0.00	475.0	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
525.0	0.50	90.00	525.0	0.0	0.1	0.0	2.00	2.00	0.00
550.0	1.00	90.00	550.0	0.0	0.4	0.1	2.00	2.00	0.00
575.0	1.50	90.00	575.0	0.0	1.0	0.1	2.00	2.00	0.00
594.9	1.90	90.00	594.9	0.0	1.6	0.2	2.00	2.00	0.00
600.0	1.90	90.00	600.0	0.0	1.7	0.2	0.00	0.00	0.00
625.0	1.90	90.00	625.0	0.0	2.6	0.3	0.00	0.00	0.00
650.0	1.90	90.00	650.0	0.0	3.4	0.4	0.00	0.00	0.00
675.0	1.90	90.00	674.9	0.0	4.2	0.5	0.00	0.00	0.00
700.0	1.90	90.00	699.9	0.0	5.1	0.7	0.00	0.00	0.00
725.0	1.90	90.00	724.9	0.0	5.9	0.8	0.00	0.00	0.00
750.0	1.90	90.00	749.9	0.0	6.7	0.9	0.00	0.00	0.00
775.0	1.90	90.00	774.9	0.0	7.5	1.0	0.00	0.00	0.00
800.0	1.90	90.00	799.9	0.0	8.4	1.1	0.00	0.00	0.00
825.0	1.90	90.00	824.9	0.0	9.2	1.2	0.00	0.00	0.00
850.0	1.90	90.00	849.8	0.0	10.0	1.3	0.00	0.00	0.00
875.0	1.90	90.00	874.8	0.0	10.9	1.4	0.00	0.00	0.00
900.0	1.90	90.00	899.8	0.0	11.7	1.5	0.00	0.00	0.00
925.0	1.90	90.00	924.8	0.0	12.5	1.6	0.00	0.00	0.00
950.0	1.90	90.00	949.8	0.0	13.3	1.7	0.00	0.00	0.00
975.0	1.90	90.00	974.8	0.0	14.2	1.8	0.00	0.00	0.00
1,000.0	1.90	90.00	999.8	0.0	15.0	1.9	0.00	0.00	0.00
1,025.0	1.90	90.00	1,024.7	0.0	15.8	2.0	0.00	0.00	0.00
1,050.0	1.90	90.00	1,049.7	0.0	16.6	2.2	0.00	0.00	0.00
1,075.0	1.90	90.00	1,074.7	0.0	17.5	2.3	0.00	0.00	0.00
1,100.0	1.90	90.00	1,099.7	0.0	18.3	2.4	0.00	0.00	0.00
1,125.0	1.90	90.00	1,124.7	0.0	19.1	2.5	0.00	0.00	0.00
1,150.0	1.90	90.00	1,149.7	0.0	20.0	2.6	0.00	0.00	0.00
1,175.0	1.90	90.00	1,174.7	0.0	20.8	2.7	0.00	0.00	0.00
1,200.0	1.90	90.00	1,199.7	0.0	21.6	2.8	0.00	0.00	0.00
1,225.0	1.90	90.00	1,224.6	0.0	22.4	2.9	0.00	0.00	0.00
1,250.0	1.90	90.00	1,249.6	0.0	23.3	3.0	0.00	0.00	0.00
1,275.0	1.90	90.00	1,274.6	0.0	24.1	3.1	0.00	0.00	0.00
1,300.0	1.90	90.00	1,299.6	0.0	24.9	3.2	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
1,325.0	1.90	90.00	1,324.6	0.0	25.8	3.3	0.00	0.00	0.00
1,350.0	1.90	90.00	1,349.6	0.0	26.6	3.4	0.00	0.00	0.00
1,375.0	1.90	90.00	1,374.6	0.0	27.4	3.6	0.00	0.00	0.00
1,400.0	1.90	90.00	1,399.5	0.0	28.2	3.7	0.00	0.00	0.00
1,405.6	1.90	90.00	1,405.1	0.0	28.4	3.7	0.00	0.00	0.00
1,425.0	1.51	90.00	1,424.5	0.0	29.0	3.8	2.00	-2.00	0.00
1,450.0	1.01	90.00	1,449.5	0.0	29.6	3.8	2.00	-2.00	0.00
1,475.0	0.51	90.00	1,474.5	0.0	29.9	3.9	2.00	-2.00	0.00
1,500.0	0.01	90.00	1,499.5	0.0	30.0	3.9	2.00	-2.00	0.00
1,500.5	0.00	0.00	1,500.0	0.0	30.0	3.9	2.00	-2.00	0.00
1,525.0	0.00	0.00	1,524.5	0.0	30.0	3.9	0.00	0.00	0.00
1,550.0	0.00	0.00	1,549.5	0.0	30.0	3.9	0.00	0.00	0.00
1,575.0	0.00	0.00	1,574.5	0.0	30.0	3.9	0.00	0.00	0.00
1,600.0	0.00	0.00	1,599.5	0.0	30.0	3.9	0.00	0.00	0.00
1,625.0	0.00	0.00	1,624.5	0.0	30.0	3.9	0.00	0.00	0.00
1,650.0	0.00	0.00	1,649.5	0.0	30.0	3.9	0.00	0.00	0.00
1,675.0	0.00	0.00	1,674.5	0.0	30.0	3.9	0.00	0.00	0.00
1,700.0	0.00	0.00	1,699.5	0.0	30.0	3.9	0.00	0.00	0.00
1,725.0	0.00	0.00	1,724.5	0.0	30.0	3.9	0.00	0.00	0.00
1,750.0	0.00	0.00	1,749.5	0.0	30.0	3.9	0.00	0.00	0.00
1,775.0	0.00	0.00	1,774.5	0.0	30.0	3.9	0.00	0.00	0.00
1,800.0	0.00	0.00	1,799.5	0.0	30.0	3.9	0.00	0.00	0.00
1,825.0	0.00	0.00	1,824.5	0.0	30.0	3.9	0.00	0.00	0.00
1,850.0	0.00	0.00	1,849.5	0.0	30.0	3.9	0.00	0.00	0.00
1,875.0	0.00	0.00	1,874.5	0.0	30.0	3.9	0.00	0.00	0.00
1,900.0	0.00	0.00	1,899.5	0.0	30.0	3.9	0.00	0.00	0.00
1,925.0	0.00	0.00	1,924.5	0.0	30.0	3.9	0.00	0.00	0.00
1,950.0	0.00	0.00	1,949.5	0.0	30.0	3.9	0.00	0.00	0.00
1,975.0	0.00	0.00	1,974.5	0.0	30.0	3.9	0.00	0.00	0.00
2,000.0	0.00	0.00	1,999.5	0.0	30.0	3.9	0.00	0.00	0.00
2,025.0	0.00	0.00	2,024.5	0.0	30.0	3.9	0.00	0.00	0.00
2,050.0	0.00	0.00	2,049.5	0.0	30.0	3.9	0.00	0.00	0.00
2,075.0	0.00	0.00	2,074.5	0.0	30.0	3.9	0.00	0.00	0.00
2,100.0	0.00	0.00	2,099.5	0.0	30.0	3.9	0.00	0.00	0.00
2,125.0	0.00	0.00	2,124.5	0.0	30.0	3.9	0.00	0.00	0.00
2,150.0	0.00	0.00	2,149.5	0.0	30.0	3.9	0.00	0.00	0.00
2,175.0	0.00	0.00	2,174.5	0.0	30.0	3.9	0.00	0.00	0.00
2,200.0	0.00	0.00	2,199.5	0.0	30.0	3.9	0.00	0.00	0.00
2,225.0	0.00	0.00	2,224.5	0.0	30.0	3.9	0.00	0.00	0.00
2,250.0	0.00	0.00	2,249.5	0.0	30.0	3.9	0.00	0.00	0.00
2,275.0	0.00	0.00	2,274.5	0.0	30.0	3.9	0.00	0.00	0.00
2,300.0	0.00	0.00	2,299.5	0.0	30.0	3.9	0.00	0.00	0.00
2,325.0	0.00	0.00	2,324.5	0.0	30.0	3.9	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
2,350.0	0.00	0.00	2,349.5	0.0	30.0	3.9	0.00	0.00	0.00
2,375.0	0.00	0.00	2,374.5	0.0	30.0	3.9	0.00	0.00	0.00
2,400.0	0.00	0.00	2,399.5	0.0	30.0	3.9	0.00	0.00	0.00
2,425.0	0.00	0.00	2,424.5	0.0	30.0	3.9	0.00	0.00	0.00
2,450.0	0.00	0.00	2,449.5	0.0	30.0	3.9	0.00	0.00	0.00
2,475.0	0.00	0.00	2,474.5	0.0	30.0	3.9	0.00	0.00	0.00
2,500.0	0.00	0.00	2,499.5	0.0	30.0	3.9	0.00	0.00	0.00
2,525.0	0.00	0.00	2,524.5	0.0	30.0	3.9	0.00	0.00	0.00
2,550.0	0.00	0.00	2,549.5	0.0	30.0	3.9	0.00	0.00	0.00
2,575.0	0.00	0.00	2,574.5	0.0	30.0	3.9	0.00	0.00	0.00
2,600.0	0.00	0.00	2,599.5	0.0	30.0	3.9	0.00	0.00	0.00
2,625.0	0.00	0.00	2,624.5	0.0	30.0	3.9	0.00	0.00	0.00
2,650.0	0.00	0.00	2,649.5	0.0	30.0	3.9	0.00	0.00	0.00
2,675.0	0.00	0.00	2,674.5	0.0	30.0	3.9	0.00	0.00	0.00
2,700.0	0.00	0.00	2,699.5	0.0	30.0	3.9	0.00	0.00	0.00
2,725.0	0.00	0.00	2,724.5	0.0	30.0	3.9	0.00	0.00	0.00
2,750.0	0.00	0.00	2,749.5	0.0	30.0	3.9	0.00	0.00	0.00
2,775.0	0.00	0.00	2,774.5	0.0	30.0	3.9	0.00	0.00	0.00
2,800.0	0.00	0.00	2,799.5	0.0	30.0	3.9	0.00	0.00	0.00
2,825.0	0.00	0.00	2,824.5	0.0	30.0	3.9	0.00	0.00	0.00
2,850.0	0.00	0.00	2,849.5	0.0	30.0	3.9	0.00	0.00	0.00
2,875.0	0.00	0.00	2,874.5	0.0	30.0	3.9	0.00	0.00	0.00
2,900.0	0.00	0.00	2,899.5	0.0	30.0	3.9	0.00	0.00	0.00
2,925.0	0.00	0.00	2,924.5	0.0	30.0	3.9	0.00	0.00	0.00
2,950.0	0.00	0.00	2,949.5	0.0	30.0	3.9	0.00	0.00	0.00
2,975.0	0.00	0.00	2,974.5	0.0	30.0	3.9	0.00	0.00	0.00
3,000.0	0.00	0.00	2,999.5	0.0	30.0	3.9	0.00	0.00	0.00
3,025.0	0.00	0.00	3,024.5	0.0	30.0	3.9	0.00	0.00	0.00
3,050.0	0.00	0.00	3,049.5	0.0	30.0	3.9	0.00	0.00	0.00
3,075.0	0.00	0.00	3,074.5	0.0	30.0	3.9	0.00	0.00	0.00
3,100.0	0.00	0.00	3,099.5	0.0	30.0	3.9	0.00	0.00	0.00
3,125.0	0.00	0.00	3,124.5	0.0	30.0	3.9	0.00	0.00	0.00
3,150.0	0.00	0.00	3,149.5	0.0	30.0	3.9	0.00	0.00	0.00
3,175.0	0.00	0.00	3,174.5	0.0	30.0	3.9	0.00	0.00	0.00
3,200.0	0.00	0.00	3,199.5	0.0	30.0	3.9	0.00	0.00	0.00
3,225.0	0.00	0.00	3,224.5	0.0	30.0	3.9	0.00	0.00	0.00
3,250.0	0.00	0.00	3,249.5	0.0	30.0	3.9	0.00	0.00	0.00
3,275.0	0.00	0.00	3,274.5	0.0	30.0	3.9	0.00	0.00	0.00
3,300.0	0.00	0.00	3,299.5	0.0	30.0	3.9	0.00	0.00	0.00
3,325.0	0.00	0.00	3,324.5	0.0	30.0	3.9	0.00	0.00	0.00
3,350.0	0.00	0.00	3,349.5	0.0	30.0	3.9	0.00	0.00	0.00
3,375.0	0.00	0.00	3,374.5	0.0	30.0	3.9	0.00	0.00	0.00
3,400.0	0.00	0.00	3,399.5	0.0	30.0	3.9	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
3,425.0	0.00	0.00	3,424.5	0.0	30.0	3.9	0.00	0.00	0.00
3,450.0	0.00	0.00	3,449.5	0.0	30.0	3.9	0.00	0.00	0.00
3,475.0	0.00	0.00	3,474.5	0.0	30.0	3.9	0.00	0.00	0.00
3,500.0	0.00	0.00	3,499.5	0.0	30.0	3.9	0.00	0.00	0.00
3,525.0	0.00	0.00	3,524.5	0.0	30.0	3.9	0.00	0.00	0.00
3,550.0	0.00	0.00	3,549.5	0.0	30.0	3.9	0.00	0.00	0.00
3,575.0	0.00	0.00	3,574.5	0.0	30.0	3.9	0.00	0.00	0.00
3,600.0	0.00	0.00	3,599.5	0.0	30.0	3.9	0.00	0.00	0.00
3,625.0	0.00	0.00	3,624.5	0.0	30.0	3.9	0.00	0.00	0.00
3,650.0	0.00	0.00	3,649.5	0.0	30.0	3.9	0.00	0.00	0.00
3,675.0	0.00	0.00	3,674.5	0.0	30.0	3.9	0.00	0.00	0.00
3,700.0	0.00	0.00	3,699.5	0.0	30.0	3.9	0.00	0.00	0.00
3,725.0	0.00	0.00	3,724.5	0.0	30.0	3.9	0.00	0.00	0.00
3,750.0	0.00	0.00	3,749.5	0.0	30.0	3.9	0.00	0.00	0.00
3,775.0	0.00	0.00	3,774.5	0.0	30.0	3.9	0.00	0.00	0.00
3,800.0	0.00	0.00	3,799.5	0.0	30.0	3.9	0.00	0.00	0.00
3,825.0	0.00	0.00	3,824.5	0.0	30.0	3.9	0.00	0.00	0.00
3,850.0	0.00	0.00	3,849.5	0.0	30.0	3.9	0.00	0.00	0.00
3,875.0	0.00	0.00	3,874.5	0.0	30.0	3.9	0.00	0.00	0.00
3,900.0	0.00	0.00	3,899.5	0.0	30.0	3.9	0.00	0.00	0.00
3,925.0	0.00	0.00	3,924.5	0.0	30.0	3.9	0.00	0.00	0.00
3,950.0	0.00	0.00	3,949.5	0.0	30.0	3.9	0.00	0.00	0.00
3,975.0	0.00	0.00	3,974.5	0.0	30.0	3.9	0.00	0.00	0.00
4,000.0	0.00	0.00	3,999.5	0.0	30.0	3.9	0.00	0.00	0.00
4,025.0	0.50	83.93	4,024.5	0.0	30.1	3.9	2.00	2.00	0.00
4,050.0	1.00	83.93	4,049.5	0.0	30.4	3.9	2.00	2.00	0.00
4,075.0	1.50	83.93	4,074.5	0.1	31.0	3.9	2.00	2.00	0.00
4,100.0	2.00	83.93	4,099.5	0.2	31.7	3.9	2.00	2.00	0.00
4,125.0	2.50	83.93	4,124.5	0.3	32.7	4.0	2.00	2.00	0.00
4,150.0	3.00	83.93	4,149.5	0.4	33.9	4.0	2.00	2.00	0.00
4,175.0	3.50	83.93	4,174.4	0.6	35.3	4.0	2.00	2.00	0.00
4,200.0	4.00	83.93	4,199.4	0.7	36.9	4.1	2.00	2.00	0.00
4,225.0	4.50	83.93	4,224.3	0.9	38.8	4.1	2.00	2.00	0.00
4,250.0	5.00	83.93	4,249.2	1.2	40.8	4.1	2.00	2.00	0.00
4,275.0	5.50	83.93	4,274.1	1.4	43.1	4.2	2.00	2.00	0.00
4,300.0	6.00	83.93	4,299.0	1.7	45.6	4.3	2.00	2.00	0.00
4,325.0	6.50	83.93	4,323.8	1.9	48.3	4.3	2.00	2.00	0.00
4,350.0	7.00	83.93	4,348.7	2.3	51.2	4.4	2.00	2.00	0.00
4,375.0	7.50	83.93	4,373.5	2.6	54.4	4.5	2.00	2.00	0.00
4,400.0	8.00	83.93	4,398.2	2.9	57.7	4.6	2.00	2.00	0.00
4,425.0	8.50	83.93	4,423.0	3.3	61.3	4.6	2.00	2.00	0.00
4,450.0	9.00	83.93	4,447.7	3.7	65.1	4.7	2.00	2.00	0.00
4,475.0	9.50	83.93	4,472.3	4.2	69.1	4.8	2.00	2.00	0.00
4,500.0	10.00	83.93	4,497.0	4.6	73.3	4.9	2.00	2.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
4,525.0	10.50	83.93	4,521.6	5.1	77.7	5.0	2.00	2.00	0.00
4,550.0	11.00	83.93	4,546.1	5.6	82.3	5.1	2.00	2.00	0.00
4,575.0	11.50	83.93	4,570.7	6.1	87.2	5.3	2.00	2.00	0.00
4,600.0	12.00	83.93	4,595.1	6.6	92.3	5.4	2.00	2.00	0.00
4,625.0	12.50	83.93	4,619.6	7.2	97.5	5.5	2.00	2.00	0.00
4,642.4	12.85	83.93	4,636.6	7.6	101.3	5.6	2.00	2.00	0.00
4,650.0	12.85	83.93	4,644.0	7.8	103.0	5.6	0.00	0.00	0.00
4,675.0	12.85	83.93	4,668.3	8.4	108.5	5.8	0.00	0.00	0.00
4,700.0	12.85	83.93	4,692.7	8.9	114.1	5.9	0.00	0.00	0.00
4,725.0	12.85	83.93	4,717.1	9.5	119.6	6.0	0.00	0.00	0.00
4,750.0	12.85	83.93	4,741.5	10.1	125.1	6.2	0.00	0.00	0.00
4,775.0	12.85	83.93	4,765.8	10.7	130.6	6.3	0.00	0.00	0.00
4,800.0	12.85	83.93	4,790.2	11.3	136.2	6.4	0.00	0.00	0.00
4,825.0	12.85	83.93	4,814.6	11.9	141.7	6.6	0.00	0.00	0.00
4,850.0	12.85	83.93	4,839.0	12.5	147.2	6.7	0.00	0.00	0.00
4,875.0	12.85	83.93	4,863.3	13.1	152.8	6.8	0.00	0.00	0.00
4,900.0	12.85	83.93	4,887.7	13.6	158.3	7.0	0.00	0.00	0.00
4,925.0	12.85	83.93	4,912.1	14.2	163.8	7.1	0.00	0.00	0.00
4,950.0	12.85	83.93	4,936.4	14.8	169.3	7.2	0.00	0.00	0.00
4,975.0	12.85	83.93	4,960.8	15.4	174.9	7.4	0.00	0.00	0.00
5,000.0	12.85	83.93	4,985.2	16.0	180.4	7.5	0.00	0.00	0.00
5,025.0	12.85	83.93	5,009.6	16.6	185.9	7.6	0.00	0.00	0.00
5,050.0	12.85	83.93	5,033.9	17.2	191.5	7.8	0.00	0.00	0.00
5,075.0	12.85	83.93	5,058.3	17.8	197.0	7.9	0.00	0.00	0.00
5,100.0	12.85	83.93	5,082.7	18.4	202.5	8.0	0.00	0.00	0.00
5,125.0	12.85	83.93	5,107.1	18.9	208.0	8.2	0.00	0.00	0.00
5,150.0	12.85	83.93	5,131.4	19.5	213.6	8.3	0.00	0.00	0.00
5,175.0	12.85	83.93	5,155.8	20.1	219.1	8.4	0.00	0.00	0.00
5,200.0	12.85	83.93	5,180.2	20.7	224.6	8.6	0.00	0.00	0.00
5,225.0	12.85	83.93	5,204.6	21.3	230.1	8.7	0.00	0.00	0.00
5,250.0	12.85	83.93	5,228.9	21.9	235.7	8.8	0.00	0.00	0.00
5,275.0	12.85	83.93	5,253.3	22.5	241.2	9.0	0.00	0.00	0.00
5,300.0	12.85	83.93	5,277.7	23.1	246.7	9.1	0.00	0.00	0.00
5,325.0	12.85	83.93	5,302.1	23.6	252.3	9.2	0.00	0.00	0.00
5,350.0	12.85	83.93	5,326.4	24.2	257.8	9.4	0.00	0.00	0.00
5,375.0	12.85	83.93	5,350.8	24.8	263.3	9.5	0.00	0.00	0.00
5,400.0	12.85	83.93	5,375.2	25.4	268.8	9.6	0.00	0.00	0.00
5,425.0	12.85	83.93	5,399.6	26.0	274.4	9.8	0.00	0.00	0.00
5,450.0	12.85	83.93	5,423.9	26.6	279.9	9.9	0.00	0.00	0.00
5,475.0	12.85	83.93	5,448.3	27.2	285.4	10.0	0.00	0.00	0.00
5,500.0	12.85	83.93	5,472.7	27.8	291.0	10.2	0.00	0.00	0.00
5,525.0	12.85	83.93	5,497.1	28.3	296.5	10.3	0.00	0.00	0.00
5,550.0	12.85	83.93	5,521.4	28.9	302.0	10.4	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
5,575.0	12.85	83.93	5,545.8	29.5	307.5	10.6	0.00	0.00	0.00
5,600.0	12.85	83.93	5,570.2	30.1	313.1	10.7	0.00	0.00	0.00
5,625.0	12.85	83.93	5,594.5	30.7	318.6	10.8	0.00	0.00	0.00
5,650.0	12.85	83.93	5,618.9	31.3	324.1	11.0	0.00	0.00	0.00
5,675.0	12.85	83.93	5,643.3	31.9	329.7	11.1	0.00	0.00	0.00
5,700.0	12.85	83.93	5,667.7	32.5	335.2	11.2	0.00	0.00	0.00
5,725.0	12.85	83.93	5,692.0	33.1	340.7	11.4	0.00	0.00	0.00
5,750.0	12.85	83.93	5,716.4	33.6	346.2	11.5	0.00	0.00	0.00
5,775.0	12.85	83.93	5,740.8	34.2	351.8	11.6	0.00	0.00	0.00
5,800.0	12.85	83.93	5,765.2	34.8	357.3	11.8	0.00	0.00	0.00
5,825.0	12.85	83.93	5,789.5	35.4	362.8	11.9	0.00	0.00	0.00
5,850.0	12.85	83.93	5,813.9	36.0	368.3	12.0	0.00	0.00	0.00
5,875.0	12.85	83.93	5,838.3	36.6	373.9	12.2	0.00	0.00	0.00
5,900.0	12.85	83.93	5,862.7	37.2	379.4	12.3	0.00	0.00	0.00
5,925.0	12.85	83.93	5,887.0	37.8	384.9	12.4	0.00	0.00	0.00
5,950.0	12.85	83.93	5,911.4	38.3	390.5	12.6	0.00	0.00	0.00
5,975.0	12.85	83.93	5,935.8	38.9	396.0	12.7	0.00	0.00	0.00
6,000.0	12.85	83.93	5,960.2	39.5	401.5	12.8	0.00	0.00	0.00
6,025.0	12.85	83.93	5,984.5	40.1	407.0	12.9	0.00	0.00	0.00
6,050.0	12.85	83.93	6,008.9	40.7	412.6	13.1	0.00	0.00	0.00
6,075.0	12.85	83.93	6,033.3	41.3	418.1	13.2	0.00	0.00	0.00
6,100.0	12.85	83.93	6,057.7	41.9	423.6	13.3	0.00	0.00	0.00
6,125.0	12.85	83.93	6,082.0	42.5	429.2	13.5	0.00	0.00	0.00
6,150.0	12.85	83.93	6,106.4	43.1	434.7	13.6	0.00	0.00	0.00
6,175.0	12.85	83.93	6,130.8	43.6	440.2	13.7	0.00	0.00	0.00
6,200.0	12.85	83.93	6,155.2	44.2	445.7	13.9	0.00	0.00	0.00
6,225.0	12.85	83.93	6,179.5	44.8	451.3	14.0	0.00	0.00	0.00
6,250.0	12.85	83.93	6,203.9	45.4	456.8	14.1	0.00	0.00	0.00
6,275.0	12.85	83.93	6,228.3	46.0	462.3	14.3	0.00	0.00	0.00
6,300.0	12.85	83.93	6,252.6	46.6	467.9	14.4	0.00	0.00	0.00
6,325.0	12.85	83.93	6,277.0	47.2	473.4	14.5	0.00	0.00	0.00
6,350.0	12.85	83.93	6,301.4	47.8	478.9	14.7	0.00	0.00	0.00
6,375.0	12.85	83.93	6,325.8	48.3	484.4	14.8	0.00	0.00	0.00
6,400.0	12.85	83.93	6,350.1	48.9	490.0	14.9	0.00	0.00	0.00
6,425.0	12.85	83.93	6,374.5	49.5	495.5	15.1	0.00	0.00	0.00
6,445.4	12.85	83.93	6,394.4	50.0	500.0	15.2	0.00	0.00	0.00
6,450.0	13.29	84.46	6,398.9	50.1	501.0	15.2	10.00	9.66	11.46
6,475.0	15.72	86.81	6,423.1	50.6	507.3	15.6	10.00	9.72	9.40
6,500.0	18.17	88.54	6,447.0	50.9	514.6	16.2	10.00	9.79	6.93
6,525.0	20.63	89.87	6,470.6	51.0	522.9	17.2	10.00	9.84	5.33
6,550.0	23.10	90.93	6,493.8	50.9	532.2	18.5	10.00	9.88	4.24
6,575.0	25.58	91.80	6,516.6	50.6	542.5	20.0	10.00	9.90	3.46
6,600.0	28.05	92.52	6,538.9	50.2	553.7	21.9	10.00	9.92	2.89

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
6,625.0	30.54	93.13	6,560.7	49.6	566.0	24.1	10.00	9.93	2.45
6,650.0	33.02	93.66	6,581.9	48.8	579.1	26.6	10.00	9.94	2.12
6,675.0	35.51	94.12	6,602.6	47.9	593.1	29.4	10.00	9.95	1.85
6,700.0	38.00	94.53	6,622.6	46.7	608.1	32.4	10.00	9.95	1.64
6,725.0	40.48	94.90	6,642.0	45.4	623.8	35.7	10.00	9.96	1.47
6,750.0	42.98	95.23	6,660.6	44.0	640.4	39.3	10.00	9.96	1.32
6,775.0	45.47	95.53	6,678.5	42.3	657.7	43.2	10.00	9.96	1.21
6,800.0	47.96	95.81	6,695.7	40.5	675.9	47.3	10.00	9.97	1.11
6,825.0	50.45	96.06	6,712.0	38.6	694.7	51.7	10.00	9.97	1.02
6,850.0	52.94	96.30	6,727.5	36.5	714.2	56.3	10.00	9.97	0.95
6,875.0	55.44	96.52	6,742.1	34.2	734.3	61.2	10.00	9.97	0.89
6,900.0	57.93	96.73	6,755.9	31.8	755.1	66.3	10.00	9.98	0.84
6,920.7	60.00	96.90	6,766.6	29.7	772.7	70.7	10.00	9.98	0.80
6,925.0	60.00	96.90	6,768.7	29.2	776.4	71.6	0.00	0.00	0.00
6,950.0	60.00	96.90	6,781.2	26.6	797.9	76.9	0.00	0.00	0.00
6,975.0	60.00	96.90	6,793.7	24.0	819.4	82.3	0.00	0.00	0.00
7,000.0	60.00	96.90	6,806.2	21.4	840.9	87.7	0.00	0.00	0.00
7,025.0	60.00	96.90	6,818.7	18.8	862.4	93.0	0.00	0.00	0.00
7,050.0	60.00	96.90	6,831.2	16.2	883.9	98.4	0.00	0.00	0.00
7,070.7	60.00	96.90	6,841.6	14.1	901.7	102.8	0.00	0.00	0.00
7,075.0	60.03	97.39	6,843.7	13.6	905.3	103.8	10.00	0.62	11.52
7,100.0	60.22	100.27	6,856.1	10.3	926.8	109.8	10.00	0.76	11.50
7,125.0	60.47	103.13	6,868.5	5.9	948.0	117.0	10.00	1.01	11.45
7,150.0	60.78	105.97	6,880.8	0.4	969.1	125.1	10.00	1.25	11.38
7,175.0	61.16	108.80	6,892.9	-6.1	990.0	134.3	10.00	1.49	11.31
7,200.0	61.59	111.61	6,904.9	-13.7	1,010.6	144.5	10.00	1.73	11.22
7,225.0	62.08	114.39	6,916.7	-22.3	1,030.8	155.6	10.00	1.96	11.12
7,250.0	62.62	117.14	6,928.3	-31.9	1,050.8	167.8	10.00	2.18	11.02
7,275.0	63.22	119.87	6,939.7	-42.6	1,070.3	180.8	10.00	2.39	10.91
7,300.0	63.87	122.57	6,950.8	-54.2	1,089.5	194.8	10.00	2.60	10.79
7,325.0	64.57	125.23	6,961.7	-66.7	1,108.2	209.7	10.00	2.80	10.66
7,350.0	65.31	127.87	6,972.3	-80.2	1,126.4	225.4	10.00	2.99	10.54
7,375.0	66.11	130.47	6,982.6	-94.6	1,144.0	242.0	10.00	3.17	10.41
7,400.0	66.94	133.04	6,992.5	-109.9	1,161.1	259.3	10.00	3.34	10.28
7,425.0	67.82	135.57	7,002.1	-126.0	1,177.6	277.4	10.00	3.50	10.15
7,450.0	68.73	138.08	7,011.4	-142.9	1,193.5	296.3	10.00	3.66	10.02
7,475.0	69.68	140.55	7,020.3	-160.6	1,208.8	315.8	10.00	3.81	9.89
7,500.0	70.67	142.99	7,028.8	-179.1	1,223.3	336.0	10.00	3.94	9.77
7,525.0	71.69	145.41	7,036.8	-198.3	1,237.1	356.9	10.00	4.07	9.65
7,550.0	72.73	147.79	7,044.5	-218.2	1,250.2	378.3	10.00	4.19	9.54
7,575.0	73.81	150.15	7,051.7	-238.7	1,262.6	400.2	10.00	4.30	9.43
7,600.0	74.91	152.48	7,058.4	-259.8	1,274.1	422.6	10.00	4.40	9.32
7,625.0	76.04	154.78	7,064.7	-281.5	1,284.9	445.5	10.00	4.50	9.23
7,650.0	77.18	157.07	7,070.5	-303.7	1,294.8	468.8	10.00	4.59	9.14

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
7,675.0	78.35	159.33	7,075.8	-326.4	1,303.9	492.5	10.00	4.66	9.05
7,700.0	79.53	161.57	7,080.6	-349.5	1,312.1	516.5	10.00	4.73	8.98
7,725.0	80.73	163.80	7,084.8	-373.0	1,319.4	540.8	10.00	4.80	8.91
7,750.0	81.94	166.01	7,088.6	-396.9	1,325.9	565.3	10.00	4.85	8.85
7,775.0	83.17	168.21	7,091.8	-421.0	1,331.4	589.9	10.00	4.90	8.79
7,800.0	84.40	170.40	7,094.6	-445.4	1,336.0	614.7	10.00	4.94	8.75
7,825.0	85.64	172.57	7,096.7	-470.1	1,339.7	639.6	10.00	4.97	8.71
7,850.0	86.89	174.75	7,098.3	-494.9	1,342.4	664.6	10.00	4.99	8.68
7,875.0	88.15	176.91	7,099.4	-519.8	1,344.2	689.5	10.00	5.01	8.66
7,900.0	89.40	179.07	7,100.0	-544.8	1,345.1	714.4	10.00	5.02	8.65
7,911.9	90.00	180.10	7,100.0	-556.6	1,345.2	726.2	10.00	5.03	8.65
7,925.0	90.00	180.10	7,100.0	-569.8	1,345.2	739.2	0.00	0.00	0.00
7,950.0	90.00	180.10	7,100.0	-594.8	1,345.1	764.0	0.00	0.00	0.00
7,975.0	90.00	180.10	7,100.0	-619.8	1,345.1	788.8	0.00	0.00	0.00
8,000.0	90.00	180.10	7,100.0	-644.8	1,345.1	813.5	0.00	0.00	0.00
8,025.0	90.00	180.10	7,100.0	-669.8	1,345.0	838.3	0.00	0.00	0.00
8,050.0	90.00	180.10	7,100.0	-694.8	1,345.0	863.1	0.00	0.00	0.00
8,075.0	90.00	180.10	7,100.0	-719.8	1,344.9	887.9	0.00	0.00	0.00
8,100.0	90.00	180.10	7,100.0	-744.8	1,344.9	912.7	0.00	0.00	0.00
8,125.0	90.00	180.10	7,100.0	-769.8	1,344.8	937.5	0.00	0.00	0.00
8,150.0	90.00	180.10	7,100.0	-794.8	1,344.8	962.2	0.00	0.00	0.00
8,175.0	90.00	180.10	7,100.0	-819.8	1,344.7	987.0	0.00	0.00	0.00
8,200.0	90.00	180.10	7,100.0	-844.8	1,344.7	1,011.8	0.00	0.00	0.00
8,225.0	90.00	180.10	7,100.0	-869.7	1,344.7	1,036.6	0.00	0.00	0.00
8,250.0	90.00	180.10	7,100.0	-894.7	1,344.6	1,061.4	0.00	0.00	0.00
8,275.0	90.00	180.10	7,100.0	-919.7	1,344.6	1,086.2	0.00	0.00	0.00
8,300.0	90.00	180.10	7,100.0	-944.7	1,344.5	1,110.9	0.00	0.00	0.00
8,325.0	90.00	180.10	7,100.0	-969.7	1,344.5	1,135.7	0.00	0.00	0.00
8,350.0	90.00	180.10	7,100.0	-994.7	1,344.4	1,160.5	0.00	0.00	0.00
8,375.0	90.00	180.10	7,100.0	-1,019.7	1,344.4	1,185.3	0.00	0.00	0.00
8,400.0	90.00	180.10	7,100.0	-1,044.7	1,344.3	1,210.1	0.00	0.00	0.00
8,425.0	90.00	180.10	7,100.0	-1,069.7	1,344.3	1,234.9	0.00	0.00	0.00
8,450.0	90.00	180.10	7,100.0	-1,094.7	1,344.3	1,259.6	0.00	0.00	0.00
8,475.0	90.00	180.10	7,100.0	-1,119.7	1,344.2	1,284.4	0.00	0.00	0.00
8,500.0	90.00	180.10	7,100.0	-1,144.7	1,344.2	1,309.2	0.00	0.00	0.00
8,525.0	90.00	180.10	7,100.0	-1,169.7	1,344.1	1,334.0	0.00	0.00	0.00
8,550.0	90.00	180.10	7,100.0	-1,194.7	1,344.1	1,358.8	0.00	0.00	0.00
8,575.0	90.00	180.10	7,100.0	-1,219.7	1,344.0	1,383.6	0.00	0.00	0.00
8,600.0	90.00	180.10	7,100.0	-1,244.7	1,344.0	1,408.3	0.00	0.00	0.00
8,625.0	90.00	180.10	7,100.0	-1,269.7	1,343.9	1,433.1	0.00	0.00	0.00
8,650.0	90.00	180.10	7,100.0	-1,294.7	1,343.9	1,457.9	0.00	0.00	0.00
8,675.0	90.00	180.10	7,100.0	-1,319.7	1,343.9	1,482.7	0.00	0.00	0.00
8,700.0	90.00	180.10	7,100.0	-1,344.7	1,343.8	1,507.5	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
8,725.0	90.00	180.10	7,100.0	-1,369.7	1,343.8	1,532.3	0.00	0.00	0.00
8,750.0	90.00	180.10	7,100.0	-1,394.7	1,343.7	1,557.0	0.00	0.00	0.00
8,775.0	90.00	180.10	7,100.0	-1,419.7	1,343.7	1,581.8	0.00	0.00	0.00
8,800.0	90.00	180.10	7,100.0	-1,444.7	1,343.6	1,606.6	0.00	0.00	0.00
8,825.0	90.00	180.10	7,100.0	-1,469.7	1,343.6	1,631.4	0.00	0.00	0.00
8,850.0	90.00	180.10	7,100.0	-1,494.7	1,343.5	1,656.2	0.00	0.00	0.00
8,875.0	90.00	180.10	7,100.0	-1,519.7	1,343.5	1,681.0	0.00	0.00	0.00
8,900.0	90.00	180.10	7,100.0	-1,544.7	1,343.5	1,705.7	0.00	0.00	0.00
8,925.0	90.00	180.10	7,100.0	-1,569.7	1,343.4	1,730.5	0.00	0.00	0.00
8,950.0	90.00	180.10	7,100.0	-1,594.7	1,343.4	1,755.3	0.00	0.00	0.00
8,975.0	90.00	180.10	7,100.0	-1,619.7	1,343.3	1,780.1	0.00	0.00	0.00
9,000.0	90.00	180.10	7,100.0	-1,644.7	1,343.3	1,804.9	0.00	0.00	0.00
9,025.0	90.00	180.10	7,100.0	-1,669.7	1,343.2	1,829.7	0.00	0.00	0.00
9,050.0	90.00	180.10	7,100.0	-1,694.7	1,343.2	1,854.5	0.00	0.00	0.00
9,075.0	90.00	180.10	7,100.0	-1,719.7	1,343.1	1,879.2	0.00	0.00	0.00
9,100.0	90.00	180.10	7,100.0	-1,744.7	1,343.1	1,904.0	0.00	0.00	0.00
9,125.0	90.00	180.10	7,100.0	-1,769.7	1,343.1	1,928.8	0.00	0.00	0.00
9,150.0	90.00	180.10	7,100.0	-1,794.7	1,343.0	1,953.6	0.00	0.00	0.00
9,175.0	90.00	180.10	7,100.0	-1,819.7	1,343.0	1,978.4	0.00	0.00	0.00
9,200.0	90.00	180.10	7,100.0	-1,844.7	1,342.9	2,003.2	0.00	0.00	0.00
9,225.0	90.00	180.10	7,100.0	-1,869.7	1,342.9	2,027.9	0.00	0.00	0.00
9,250.0	90.00	180.10	7,100.0	-1,894.7	1,342.8	2,052.7	0.00	0.00	0.00
9,275.0	90.00	180.10	7,100.0	-1,919.7	1,342.8	2,077.5	0.00	0.00	0.00
9,300.0	90.00	180.10	7,100.0	-1,944.7	1,342.8	2,102.3	0.00	0.00	0.00
9,325.0	90.00	180.10	7,100.0	-1,969.7	1,342.7	2,127.1	0.00	0.00	0.00
9,350.0	90.00	180.10	7,100.0	-1,994.7	1,342.7	2,151.9	0.00	0.00	0.00
9,375.0	90.00	180.10	7,100.0	-2,019.7	1,342.6	2,176.6	0.00	0.00	0.00
9,400.0	90.00	180.10	7,100.0	-2,044.7	1,342.6	2,201.4	0.00	0.00	0.00
9,425.0	90.00	180.10	7,100.0	-2,069.7	1,342.5	2,226.2	0.00	0.00	0.00
9,450.0	90.00	180.10	7,100.0	-2,094.7	1,342.5	2,251.0	0.00	0.00	0.00
9,475.0	90.00	180.10	7,100.0	-2,119.7	1,342.4	2,275.8	0.00	0.00	0.00
9,500.0	90.00	180.10	7,100.0	-2,144.7	1,342.4	2,300.6	0.00	0.00	0.00
9,525.0	90.00	180.10	7,100.0	-2,169.7	1,342.4	2,325.3	0.00	0.00	0.00
9,550.0	90.00	180.10	7,100.0	-2,194.7	1,342.3	2,350.1	0.00	0.00	0.00
9,575.0	90.00	180.10	7,100.0	-2,219.7	1,342.3	2,374.9	0.00	0.00	0.00
9,600.0	90.00	180.10	7,100.0	-2,244.7	1,342.2	2,399.7	0.00	0.00	0.00
9,625.0	90.00	180.10	7,100.0	-2,269.7	1,342.2	2,424.5	0.00	0.00	0.00
9,650.0	90.00	180.10	7,100.0	-2,294.7	1,342.1	2,449.3	0.00	0.00	0.00
9,675.0	90.00	180.10	7,100.0	-2,319.7	1,342.1	2,474.0	0.00	0.00	0.00
9,700.0	90.00	180.10	7,100.0	-2,344.7	1,342.0	2,498.8	0.00	0.00	0.00
9,725.0	90.00	180.10	7,100.0	-2,369.7	1,342.0	2,523.6	0.00	0.00	0.00
9,750.0	90.00	180.10	7,100.0	-2,394.7	1,342.0	2,548.4	0.00	0.00	0.00
9,775.0	90.00	180.10	7,100.0	-2,419.7	1,341.9	2,573.2	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
9,800.0	90.00	180.10	7,100.0	-2,444.7	1,341.9	2,598.0	0.00	0.00	0.00
9,825.0	90.00	180.10	7,100.0	-2,469.7	1,341.8	2,622.7	0.00	0.00	0.00
9,850.0	90.00	180.10	7,100.0	-2,494.7	1,341.8	2,647.5	0.00	0.00	0.00
9,875.0	90.00	180.10	7,100.0	-2,519.7	1,341.7	2,672.3	0.00	0.00	0.00
9,900.0	90.00	180.10	7,100.0	-2,544.7	1,341.7	2,697.1	0.00	0.00	0.00
9,925.0	90.00	180.10	7,100.0	-2,569.7	1,341.6	2,721.9	0.00	0.00	0.00
9,950.0	90.00	180.10	7,100.0	-2,594.7	1,341.6	2,746.7	0.00	0.00	0.00
9,975.0	90.00	180.10	7,100.0	-2,619.7	1,341.6	2,771.4	0.00	0.00	0.00
10,000.0	90.00	180.10	7,100.0	-2,644.7	1,341.5	2,796.2	0.00	0.00	0.00
10,025.0	90.00	180.10	7,100.0	-2,669.7	1,341.5	2,821.0	0.00	0.00	0.00
10,050.0	90.00	180.10	7,100.0	-2,694.7	1,341.4	2,845.8	0.00	0.00	0.00
10,075.0	90.00	180.10	7,100.0	-2,719.7	1,341.4	2,870.6	0.00	0.00	0.00
10,100.0	90.00	180.10	7,100.0	-2,744.7	1,341.3	2,895.4	0.00	0.00	0.00
10,125.0	90.00	180.10	7,100.0	-2,769.7	1,341.3	2,920.1	0.00	0.00	0.00
10,150.0	90.00	180.10	7,100.0	-2,794.7	1,341.2	2,944.9	0.00	0.00	0.00
10,175.0	90.00	180.10	7,100.0	-2,819.7	1,341.2	2,969.7	0.00	0.00	0.00
10,200.0	90.00	180.10	7,100.0	-2,844.7	1,341.2	2,994.5	0.00	0.00	0.00
10,225.0	90.00	180.10	7,100.0	-2,869.7	1,341.1	3,019.3	0.00	0.00	0.00
10,250.0	90.00	180.10	7,100.0	-2,894.7	1,341.1	3,044.1	0.00	0.00	0.00
10,275.0	90.00	180.10	7,100.0	-2,919.7	1,341.0	3,068.8	0.00	0.00	0.00
10,300.0	90.00	180.10	7,100.0	-2,944.7	1,341.0	3,093.6	0.00	0.00	0.00
10,325.0	90.00	180.10	7,100.0	-2,969.7	1,340.9	3,118.4	0.00	0.00	0.00
10,350.0	90.00	180.10	7,100.0	-2,994.7	1,340.9	3,143.2	0.00	0.00	0.00
10,375.0	90.00	180.10	7,100.0	-3,019.7	1,340.8	3,168.0	0.00	0.00	0.00
10,400.0	90.00	180.10	7,100.0	-3,044.7	1,340.8	3,192.8	0.00	0.00	0.00
10,425.0	90.00	180.10	7,100.0	-3,069.7	1,340.8	3,217.5	0.00	0.00	0.00
10,450.0	90.00	180.10	7,100.0	-3,094.7	1,340.7	3,242.3	0.00	0.00	0.00
10,475.0	90.00	180.10	7,100.0	-3,119.7	1,340.7	3,267.1	0.00	0.00	0.00
10,500.0	90.00	180.10	7,100.0	-3,144.7	1,340.6	3,291.9	0.00	0.00	0.00
10,525.0	90.00	180.10	7,100.0	-3,169.7	1,340.6	3,316.7	0.00	0.00	0.00
10,550.0	90.00	180.10	7,100.0	-3,194.7	1,340.5	3,341.5	0.00	0.00	0.00
10,575.0	90.00	180.10	7,100.0	-3,219.7	1,340.5	3,366.3	0.00	0.00	0.00
10,600.0	90.00	180.10	7,100.0	-3,244.7	1,340.4	3,391.0	0.00	0.00	0.00
10,625.0	90.00	180.10	7,100.0	-3,269.7	1,340.4	3,415.8	0.00	0.00	0.00
10,650.0	90.00	180.10	7,100.0	-3,294.7	1,340.4	3,440.6	0.00	0.00	0.00
10,675.0	90.00	180.10	7,100.0	-3,319.7	1,340.3	3,465.4	0.00	0.00	0.00
10,700.0	90.00	180.10	7,100.0	-3,344.7	1,340.3	3,490.2	0.00	0.00	0.00
10,725.0	90.00	180.10	7,100.0	-3,369.7	1,340.2	3,515.0	0.00	0.00	0.00
10,750.0	90.00	180.10	7,100.0	-3,394.7	1,340.2	3,539.7	0.00	0.00	0.00
10,775.0	90.00	180.10	7,100.0	-3,419.7	1,340.1	3,564.5	0.00	0.00	0.00
10,800.0	90.00	180.10	7,100.0	-3,444.7	1,340.1	3,589.3	0.00	0.00	0.00
10,825.0	90.00	180.10	7,100.0	-3,469.7	1,340.0	3,614.1	0.00	0.00	0.00
10,850.0	90.00	180.10	7,100.0	-3,494.7	1,340.0	3,638.9	0.00	0.00	0.00
10,875.0	90.00	180.10	7,100.0	-3,519.7	1,340.0	3,663.7	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
10,900.0	90.00	180.10	7,100.0	-3,544.7	1,339.9	3,688.4	0.00	0.00	0.00
10,925.0	90.00	180.10	7,100.0	-3,569.7	1,339.9	3,713.2	0.00	0.00	0.00
10,950.0	90.00	180.10	7,100.0	-3,594.7	1,339.8	3,738.0	0.00	0.00	0.00
10,975.0	90.00	180.10	7,100.0	-3,619.7	1,339.8	3,762.8	0.00	0.00	0.00
11,000.0	90.00	180.10	7,100.0	-3,644.7	1,339.7	3,787.6	0.00	0.00	0.00
11,025.0	90.00	180.10	7,100.0	-3,669.7	1,339.7	3,812.4	0.00	0.00	0.00
11,050.0	90.00	180.10	7,100.0	-3,694.7	1,339.6	3,837.1	0.00	0.00	0.00
11,075.0	90.00	180.10	7,100.0	-3,719.7	1,339.6	3,861.9	0.00	0.00	0.00
11,100.0	90.00	180.10	7,100.0	-3,744.7	1,339.6	3,886.7	0.00	0.00	0.00
11,125.0	90.00	180.10	7,100.0	-3,769.7	1,339.5	3,911.5	0.00	0.00	0.00
11,150.0	90.00	180.10	7,100.0	-3,794.7	1,339.5	3,936.3	0.00	0.00	0.00
11,175.0	90.00	180.10	7,100.0	-3,819.7	1,339.4	3,961.1	0.00	0.00	0.00
11,200.0	90.00	180.10	7,100.0	-3,844.7	1,339.4	3,985.8	0.00	0.00	0.00
11,225.0	90.00	180.10	7,100.0	-3,869.7	1,339.3	4,010.6	0.00	0.00	0.00
11,250.0	90.00	180.10	7,100.0	-3,894.7	1,339.3	4,035.4	0.00	0.00	0.00
11,275.0	90.00	180.10	7,100.0	-3,919.7	1,339.3	4,060.2	0.00	0.00	0.00
11,300.0	90.00	180.10	7,100.0	-3,944.7	1,339.2	4,085.0	0.00	0.00	0.00
11,325.0	90.00	180.10	7,100.0	-3,969.7	1,339.2	4,109.8	0.00	0.00	0.00
11,350.0	90.00	180.10	7,100.0	-3,994.7	1,339.1	4,134.5	0.00	0.00	0.00
11,375.0	90.00	180.10	7,100.0	-4,019.7	1,339.1	4,159.3	0.00	0.00	0.00
11,400.0	90.00	180.10	7,100.0	-4,044.7	1,339.0	4,184.1	0.00	0.00	0.00
11,425.0	90.00	180.10	7,100.0	-4,069.7	1,339.0	4,208.9	0.00	0.00	0.00
11,450.0	90.00	180.10	7,100.0	-4,094.7	1,338.9	4,233.7	0.00	0.00	0.00
11,475.0	90.00	180.10	7,100.0	-4,119.7	1,338.9	4,258.5	0.00	0.00	0.00
11,500.0	90.00	180.10	7,100.0	-4,144.7	1,338.9	4,283.2	0.00	0.00	0.00
11,525.0	90.00	180.10	7,100.0	-4,169.7	1,338.8	4,308.0	0.00	0.00	0.00
11,550.0	90.00	180.10	7,100.0	-4,194.7	1,338.8	4,332.8	0.00	0.00	0.00
11,575.0	90.00	180.10	7,100.0	-4,219.7	1,338.7	4,357.6	0.00	0.00	0.00
11,600.0	90.00	180.10	7,100.0	-4,244.7	1,338.7	4,382.4	0.00	0.00	0.00
11,625.0	90.00	180.10	7,100.0	-4,269.7	1,338.6	4,407.2	0.00	0.00	0.00
11,650.0	90.00	180.10	7,100.0	-4,294.7	1,338.6	4,431.9	0.00	0.00	0.00
11,675.0	90.00	180.10	7,100.0	-4,319.7	1,338.5	4,456.7	0.00	0.00	0.00
11,700.0	90.00	180.10	7,100.0	-4,344.7	1,338.5	4,481.5	0.00	0.00	0.00
11,725.0	90.00	180.10	7,100.0	-4,369.7	1,338.5	4,506.3	0.00	0.00	0.00
11,750.0	90.00	180.10	7,100.0	-4,394.7	1,338.4	4,531.1	0.00	0.00	0.00
11,775.0	90.00	180.10	7,100.0	-4,419.7	1,338.4	4,555.9	0.00	0.00	0.00
11,800.0	90.00	180.10	7,100.0	-4,444.7	1,338.3	4,580.6	0.00	0.00	0.00
11,825.0	90.00	180.10	7,100.0	-4,469.7	1,338.3	4,605.4	0.00	0.00	0.00
11,850.0	90.00	180.10	7,100.0	-4,494.7	1,338.2	4,630.2	0.00	0.00	0.00
11,875.0	90.00	180.10	7,100.0	-4,519.7	1,338.2	4,655.0	0.00	0.00	0.00
11,900.0	90.00	180.10	7,100.0	-4,544.7	1,338.1	4,679.8	0.00	0.00	0.00
11,925.0	90.00	180.10	7,100.0	-4,569.7	1,338.1	4,704.6	0.00	0.00	0.00
11,950.0	90.00	180.10	7,100.0	-4,594.7	1,338.1	4,729.4	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
11,975.0	90.00	180.10	7,100.0	-4,619.7	1,338.0	4,754.1	0.00	0.00	0.00
12,000.0	90.00	180.10	7,100.0	-4,644.7	1,338.0	4,778.9	0.00	0.00	0.00
12,025.0	90.00	180.10	7,100.0	-4,669.7	1,337.9	4,803.7	0.00	0.00	0.00
12,050.0	90.00	180.10	7,100.0	-4,694.7	1,337.9	4,828.5	0.00	0.00	0.00
12,075.0	90.00	180.10	7,100.0	-4,719.7	1,337.8	4,853.3	0.00	0.00	0.00
12,100.0	90.00	180.10	7,100.0	-4,744.7	1,337.8	4,878.1	0.00	0.00	0.00
12,125.0	90.00	180.10	7,100.0	-4,769.7	1,337.7	4,902.8	0.00	0.00	0.00
12,150.0	90.00	180.10	7,100.0	-4,794.7	1,337.7	4,927.6	0.00	0.00	0.00
12,175.0	90.00	180.10	7,100.0	-4,819.7	1,337.7	4,952.4	0.00	0.00	0.00
12,200.0	90.00	180.10	7,100.0	-4,844.7	1,337.6	4,977.2	0.00	0.00	0.00
12,225.0	90.00	180.10	7,100.0	-4,869.7	1,337.6	5,002.0	0.00	0.00	0.00
12,250.0	90.00	180.10	7,100.0	-4,894.7	1,337.5	5,026.8	0.00	0.00	0.00
12,275.0	90.00	180.10	7,100.0	-4,919.7	1,337.5	5,051.5	0.00	0.00	0.00
12,300.0	90.00	180.10	7,100.0	-4,944.7	1,337.4	5,076.3	0.00	0.00	0.00
12,325.0	90.00	180.10	7,100.0	-4,969.7	1,337.4	5,101.1	0.00	0.00	0.00
12,350.0	90.00	180.10	7,100.0	-4,994.7	1,337.3	5,125.9	0.00	0.00	0.00
12,375.0	90.00	180.10	7,100.0	-5,019.7	1,337.3	5,150.7	0.00	0.00	0.00
12,400.0	90.00	180.10	7,100.0	-5,044.7	1,337.3	5,175.5	0.00	0.00	0.00
12,425.0	90.00	180.10	7,100.0	-5,069.7	1,337.2	5,200.2	0.00	0.00	0.00
12,450.0	90.00	180.10	7,100.0	-5,094.7	1,337.2	5,225.0	0.00	0.00	0.00
12,475.0	90.00	180.10	7,100.0	-5,119.7	1,337.1	5,249.8	0.00	0.00	0.00
12,500.0	90.00	180.10	7,100.0	-5,144.7	1,337.1	5,274.6	0.00	0.00	0.00
12,525.0	90.00	180.10	7,100.0	-5,169.7	1,337.0	5,299.4	0.00	0.00	0.00
12,550.0	90.00	180.10	7,100.0	-5,194.7	1,337.0	5,324.2	0.00	0.00	0.00
12,575.0	90.00	180.10	7,100.0	-5,219.7	1,336.9	5,348.9	0.00	0.00	0.00
12,600.0	90.00	180.10	7,100.0	-5,244.7	1,336.9	5,373.7	0.00	0.00	0.00
12,625.0	90.00	180.10	7,100.0	-5,269.7	1,336.9	5,398.5	0.00	0.00	0.00
12,650.0	90.00	180.10	7,100.0	-5,294.7	1,336.8	5,423.3	0.00	0.00	0.00
12,675.0	90.00	180.10	7,100.0	-5,319.7	1,336.8	5,448.1	0.00	0.00	0.00
12,700.0	90.00	180.10	7,100.0	-5,344.7	1,336.7	5,472.9	0.00	0.00	0.00
12,725.0	90.00	180.10	7,100.0	-5,369.7	1,336.7	5,497.6	0.00	0.00	0.00
12,750.0	90.00	180.10	7,100.0	-5,394.7	1,336.6	5,522.4	0.00	0.00	0.00
12,775.0	90.00	180.10	7,100.0	-5,419.7	1,336.6	5,547.2	0.00	0.00	0.00
12,800.0	90.00	180.10	7,100.0	-5,444.7	1,336.5	5,572.0	0.00	0.00	0.00
12,825.0	90.00	180.10	7,100.0	-5,469.7	1,336.5	5,596.8	0.00	0.00	0.00
12,850.0	90.00	180.10	7,100.0	-5,494.7	1,336.5	5,621.6	0.00	0.00	0.00
12,875.0	90.00	180.10	7,100.0	-5,519.7	1,336.4	5,646.3	0.00	0.00	0.00
12,900.0	90.00	180.10	7,100.0	-5,544.7	1,336.4	5,671.1	0.00	0.00	0.00
12,925.0	90.00	180.10	7,100.0	-5,569.7	1,336.3	5,695.9	0.00	0.00	0.00
12,950.0	90.00	180.10	7,100.0	-5,594.7	1,336.3	5,720.7	0.00	0.00	0.00
12,975.0	90.00	180.10	7,100.0	-5,619.7	1,336.2	5,745.5	0.00	0.00	0.00
13,000.0	90.00	180.10	7,100.0	-5,644.7	1,336.2	5,770.3	0.00	0.00	0.00
13,025.0	90.00	180.10	7,100.0	-5,669.7	1,336.2	5,795.0	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
13,050.0	90.00	180.10	7,100.0	-5,694.7	1,336.1	5,819.8	0.00	0.00	0.00
13,075.0	90.00	180.10	7,100.0	-5,719.7	1,336.1	5,844.6	0.00	0.00	0.00
13,100.0	90.00	180.10	7,100.0	-5,744.7	1,336.0	5,869.4	0.00	0.00	0.00
13,125.0	90.00	180.10	7,100.0	-5,769.7	1,336.0	5,894.2	0.00	0.00	0.00
13,150.0	90.00	180.10	7,100.0	-5,794.7	1,335.9	5,919.0	0.00	0.00	0.00
13,175.0	90.00	180.10	7,100.0	-5,819.7	1,335.9	5,943.7	0.00	0.00	0.00
13,200.0	90.00	180.10	7,100.0	-5,844.7	1,335.8	5,968.5	0.00	0.00	0.00
13,225.0	90.00	180.10	7,100.0	-5,869.7	1,335.8	5,993.3	0.00	0.00	0.00
13,250.0	90.00	180.10	7,100.0	-5,894.7	1,335.8	6,018.1	0.00	0.00	0.00
13,275.0	90.00	180.10	7,100.0	-5,919.7	1,335.7	6,042.9	0.00	0.00	0.00
13,300.0	90.00	180.10	7,100.0	-5,944.7	1,335.7	6,067.7	0.00	0.00	0.00
13,325.0	90.00	180.10	7,100.0	-5,969.7	1,335.6	6,092.5	0.00	0.00	0.00
13,350.0	90.00	180.10	7,100.0	-5,994.7	1,335.6	6,117.2	0.00	0.00	0.00
13,375.0	90.00	180.10	7,100.0	-6,019.7	1,335.5	6,142.0	0.00	0.00	0.00
13,400.0	90.00	180.10	7,100.0	-6,044.7	1,335.5	6,166.8	0.00	0.00	0.00
13,425.0	90.00	180.10	7,100.0	-6,069.7	1,335.4	6,191.6	0.00	0.00	0.00
13,450.0	90.00	180.10	7,100.0	-6,094.7	1,335.4	6,216.4	0.00	0.00	0.00
13,475.0	90.00	180.10	7,100.0	-6,119.7	1,335.4	6,241.2	0.00	0.00	0.00
13,500.0	90.00	180.10	7,100.0	-6,144.7	1,335.3	6,265.9	0.00	0.00	0.00
13,525.0	90.00	180.10	7,100.0	-6,169.7	1,335.3	6,290.7	0.00	0.00	0.00
13,550.0	90.00	180.10	7,100.0	-6,194.7	1,335.2	6,315.5	0.00	0.00	0.00
13,575.0	90.00	180.10	7,100.0	-6,219.7	1,335.2	6,340.3	0.00	0.00	0.00
13,600.0	90.00	180.10	7,100.0	-6,244.7	1,335.1	6,365.1	0.00	0.00	0.00
13,625.0	90.00	180.10	7,100.0	-6,269.7	1,335.1	6,389.9	0.00	0.00	0.00
13,650.0	90.00	180.10	7,100.0	-6,294.7	1,335.0	6,414.6	0.00	0.00	0.00
13,675.0	90.00	180.10	7,100.0	-6,319.7	1,335.0	6,439.4	0.00	0.00	0.00
13,700.0	90.00	180.10	7,100.0	-6,344.7	1,335.0	6,464.2	0.00	0.00	0.00
13,725.0	90.00	180.10	7,100.0	-6,369.7	1,334.9	6,489.0	0.00	0.00	0.00
13,750.0	90.00	180.10	7,100.0	-6,394.7	1,334.9	6,513.8	0.00	0.00	0.00
13,775.0	90.00	180.10	7,100.0	-6,419.7	1,334.8	6,538.6	0.00	0.00	0.00
13,800.0	90.00	180.10	7,100.0	-6,444.7	1,334.8	6,563.3	0.00	0.00	0.00
13,825.0	90.00	180.10	7,100.0	-6,469.7	1,334.7	6,588.1	0.00	0.00	0.00
13,850.0	90.00	180.10	7,100.0	-6,494.7	1,334.7	6,612.9	0.00	0.00	0.00
13,875.0	90.00	180.10	7,100.0	-6,519.7	1,334.6	6,637.7	0.00	0.00	0.00
13,900.0	90.00	180.10	7,100.0	-6,544.7	1,334.6	6,662.5	0.00	0.00	0.00
13,925.0	90.00	180.10	7,100.0	-6,569.7	1,334.6	6,687.3	0.00	0.00	0.00
13,950.0	90.00	180.10	7,100.0	-6,594.7	1,334.5	6,712.0	0.00	0.00	0.00
13,975.0	90.00	180.10	7,100.0	-6,619.7	1,334.5	6,736.8	0.00	0.00	0.00
14,000.0	90.00	180.10	7,100.0	-6,644.7	1,334.4	6,761.6	0.00	0.00	0.00
14,025.0	90.00	180.10	7,100.0	-6,669.7	1,334.4	6,786.4	0.00	0.00	0.00
14,050.0	90.00	180.10	7,100.0	-6,694.7	1,334.3	6,811.2	0.00	0.00	0.00
14,075.0	90.00	180.10	7,100.0	-6,719.7	1,334.3	6,836.0	0.00	0.00	0.00
14,100.0	90.00	180.10	7,100.0	-6,744.7	1,334.2	6,860.7	0.00	0.00	0.00
14,125.0	90.00	180.10	7,100.0	-6,769.7	1,334.2	6,885.5	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
14,150.0	90.00	180.10	7,100.0	-6,794.7	1,334.2	6,910.3	0.00	0.00	0.00
14,175.0	90.00	180.10	7,100.0	-6,819.7	1,334.1	6,935.1	0.00	0.00	0.00
14,200.0	90.00	180.10	7,100.0	-6,844.7	1,334.1	6,959.9	0.00	0.00	0.00
14,225.0	90.00	180.10	7,100.0	-6,869.7	1,334.0	6,984.7	0.00	0.00	0.00
14,250.0	90.00	180.10	7,100.0	-6,894.7	1,334.0	7,009.4	0.00	0.00	0.00
14,275.0	90.00	180.10	7,100.0	-6,919.7	1,333.9	7,034.2	0.00	0.00	0.00
14,300.0	90.00	180.10	7,100.0	-6,944.7	1,333.9	7,059.0	0.00	0.00	0.00
14,325.0	90.00	180.10	7,100.0	-6,969.7	1,333.8	7,083.8	0.00	0.00	0.00
14,350.0	90.00	180.10	7,100.0	-6,994.7	1,333.8	7,108.6	0.00	0.00	0.00
14,375.0	90.00	180.10	7,100.0	-7,019.7	1,333.8	7,133.4	0.00	0.00	0.00
14,400.0	90.00	180.10	7,100.0	-7,044.7	1,333.7	7,158.1	0.00	0.00	0.00
14,425.0	90.00	180.10	7,100.0	-7,069.7	1,333.7	7,182.9	0.00	0.00	0.00
14,450.0	90.00	180.10	7,100.0	-7,094.7	1,333.6	7,207.7	0.00	0.00	0.00
14,475.0	90.00	180.10	7,100.0	-7,119.7	1,333.6	7,232.5	0.00	0.00	0.00
14,500.0	90.00	180.10	7,100.0	-7,144.7	1,333.5	7,257.3	0.00	0.00	0.00
14,525.0	90.00	180.10	7,100.0	-7,169.7	1,333.5	7,282.1	0.00	0.00	0.00
14,550.0	90.00	180.10	7,100.0	-7,194.7	1,333.4	7,306.8	0.00	0.00	0.00
14,575.0	90.00	180.10	7,100.0	-7,219.7	1,333.4	7,331.6	0.00	0.00	0.00
14,600.0	90.00	180.10	7,100.0	-7,244.7	1,333.4	7,356.4	0.00	0.00	0.00
14,625.0	90.00	180.10	7,100.0	-7,269.7	1,333.3	7,381.2	0.00	0.00	0.00
14,650.0	90.00	180.10	7,100.0	-7,294.7	1,333.3	7,406.0	0.00	0.00	0.00
14,675.0	90.00	180.10	7,100.0	-7,319.7	1,333.2	7,430.8	0.00	0.00	0.00
14,700.0	90.00	180.10	7,100.0	-7,344.7	1,333.2	7,455.5	0.00	0.00	0.00
14,725.0	90.00	180.10	7,100.0	-7,369.7	1,333.1	7,480.3	0.00	0.00	0.00
14,750.0	90.00	180.10	7,100.0	-7,394.7	1,333.1	7,505.1	0.00	0.00	0.00
14,775.0	90.00	180.10	7,100.0	-7,419.7	1,333.0	7,529.9	0.00	0.00	0.00
14,800.0	90.00	180.10	7,100.0	-7,444.7	1,333.0	7,554.7	0.00	0.00	0.00
14,825.0	90.00	180.10	7,100.0	-7,469.7	1,333.0	7,579.5	0.00	0.00	0.00
14,850.0	90.00	180.10	7,100.0	-7,494.7	1,332.9	7,604.3	0.00	0.00	0.00
14,875.0	90.00	180.10	7,100.0	-7,519.7	1,332.9	7,629.0	0.00	0.00	0.00
14,900.0	90.00	180.10	7,100.0	-7,544.7	1,332.8	7,653.8	0.00	0.00	0.00
14,925.0	90.00	180.10	7,100.0	-7,569.7	1,332.8	7,678.6	0.00	0.00	0.00
14,950.0	90.00	180.10	7,100.0	-7,594.7	1,332.7	7,703.4	0.00	0.00	0.00
14,975.0	90.00	180.10	7,100.0	-7,619.7	1,332.7	7,728.2	0.00	0.00	0.00
15,000.0	90.00	180.10	7,100.0	-7,644.7	1,332.7	7,753.0	0.00	0.00	0.00
15,025.0	90.00	180.10	7,100.0	-7,669.7	1,332.6	7,777.7	0.00	0.00	0.00
15,050.0	90.00	180.10	7,100.0	-7,694.7	1,332.6	7,802.5	0.00	0.00	0.00
15,075.0	90.00	180.10	7,100.0	-7,719.7	1,332.5	7,827.3	0.00	0.00	0.00
15,100.0	90.00	180.10	7,100.0	-7,744.7	1,332.5	7,852.1	0.00	0.00	0.00
15,125.0	90.00	180.10	7,100.0	-7,769.7	1,332.4	7,876.9	0.00	0.00	0.00
15,150.0	90.00	180.10	7,100.0	-7,794.7	1,332.4	7,901.7	0.00	0.00	0.00
15,175.0	90.00	180.10	7,100.0	-7,819.7	1,332.3	7,926.4	0.00	0.00	0.00
15,200.0	90.00	180.10	7,100.0	-7,844.7	1,332.3	7,951.2	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
15,225.0	90.00	180.10	7,100.0	-7,869.7	1,332.3	7,976.0	0.00	0.00	0.00
15,250.0	90.00	180.10	7,100.0	-7,894.7	1,332.2	8,000.8	0.00	0.00	0.00
15,275.0	90.00	180.10	7,100.0	-7,919.7	1,332.2	8,025.6	0.00	0.00	0.00
15,300.0	90.00	180.10	7,100.0	-7,944.7	1,332.1	8,050.4	0.00	0.00	0.00
15,325.0	90.00	180.10	7,100.0	-7,969.7	1,332.1	8,075.1	0.00	0.00	0.00
15,350.0	90.00	180.10	7,100.0	-7,994.7	1,332.0	8,099.9	0.00	0.00	0.00
15,375.0	90.00	180.10	7,100.0	-8,019.7	1,332.0	8,124.7	0.00	0.00	0.00
15,400.0	90.00	180.10	7,100.0	-8,044.7	1,331.9	8,149.5	0.00	0.00	0.00
15,425.0	90.00	180.10	7,100.0	-8,069.7	1,331.9	8,174.3	0.00	0.00	0.00
15,450.0	90.00	180.10	7,100.0	-8,094.7	1,331.9	8,199.1	0.00	0.00	0.00
15,475.0	90.00	180.10	7,100.0	-8,119.7	1,331.8	8,223.8	0.00	0.00	0.00
15,500.0	90.00	180.10	7,100.0	-8,144.7	1,331.8	8,248.6	0.00	0.00	0.00
15,525.0	90.00	180.10	7,100.0	-8,169.7	1,331.7	8,273.4	0.00	0.00	0.00
15,550.0	90.00	180.10	7,100.0	-8,194.7	1,331.7	8,298.2	0.00	0.00	0.00
15,575.0	90.00	180.10	7,100.0	-8,219.7	1,331.6	8,323.0	0.00	0.00	0.00
15,600.0	90.00	180.10	7,100.0	-8,244.7	1,331.6	8,347.8	0.00	0.00	0.00
15,625.0	90.00	180.10	7,100.0	-8,269.7	1,331.5	8,372.5	0.00	0.00	0.00
15,650.0	90.00	180.10	7,100.0	-8,294.7	1,331.5	8,397.3	0.00	0.00	0.00
15,675.0	90.00	180.10	7,100.0	-8,319.7	1,331.5	8,422.1	0.00	0.00	0.00
15,700.0	90.00	180.10	7,100.0	-8,344.7	1,331.4	8,446.9	0.00	0.00	0.00
15,725.0	90.00	180.10	7,100.0	-8,369.7	1,331.4	8,471.7	0.00	0.00	0.00
15,750.0	90.00	180.10	7,100.0	-8,394.7	1,331.3	8,496.5	0.00	0.00	0.00
15,775.0	90.00	180.10	7,100.0	-8,419.7	1,331.3	8,521.2	0.00	0.00	0.00
15,800.0	90.00	180.10	7,100.0	-8,444.7	1,331.2	8,546.0	0.00	0.00	0.00
15,825.0	90.00	180.10	7,100.0	-8,469.7	1,331.2	8,570.8	0.00	0.00	0.00
15,850.0	90.00	180.10	7,100.0	-8,494.7	1,331.1	8,595.6	0.00	0.00	0.00
15,875.0	90.00	180.10	7,100.0	-8,519.7	1,331.1	8,620.4	0.00	0.00	0.00
15,900.0	90.00	180.10	7,100.0	-8,544.7	1,331.1	8,645.2	0.00	0.00	0.00
15,925.0	90.00	180.10	7,100.0	-8,569.7	1,331.0	8,669.9	0.00	0.00	0.00
15,950.0	90.00	180.10	7,100.0	-8,594.7	1,331.0	8,694.7	0.00	0.00	0.00
15,975.0	90.00	180.10	7,100.0	-8,619.7	1,330.9	8,719.5	0.00	0.00	0.00
16,000.0	90.00	180.10	7,100.0	-8,644.7	1,330.9	8,744.3	0.00	0.00	0.00
16,025.0	90.00	180.10	7,100.0	-8,669.7	1,330.8	8,769.1	0.00	0.00	0.00
16,050.0	90.00	180.10	7,100.0	-8,694.7	1,330.8	8,793.9	0.00	0.00	0.00
16,075.0	90.00	180.10	7,100.0	-8,719.7	1,330.7	8,818.6	0.00	0.00	0.00
16,100.0	90.00	180.10	7,100.0	-8,744.7	1,330.7	8,843.4	0.00	0.00	0.00
16,125.0	90.00	180.10	7,100.0	-8,769.7	1,330.7	8,868.2	0.00	0.00	0.00
16,150.0	90.00	180.10	7,100.0	-8,794.7	1,330.6	8,893.0	0.00	0.00	0.00
16,175.0	90.00	180.10	7,100.0	-8,819.7	1,330.6	8,917.8	0.00	0.00	0.00
16,200.0	90.00	180.10	7,100.0	-8,844.7	1,330.5	8,942.6	0.00	0.00	0.00
16,225.0	90.00	180.10	7,100.0	-8,869.7	1,330.5	8,967.4	0.00	0.00	0.00
16,250.0	90.00	180.10	7,100.0	-8,894.7	1,330.4	8,992.1	0.00	0.00	0.00
16,275.0	90.00	180.10	7,100.0	-8,919.7	1,330.4	9,016.9	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
16,300.0	90.00	180.10	7,100.0	-8,944.7	1,330.3	9,041.7	0.00	0.00	0.00
16,325.0	90.00	180.10	7,100.0	-8,969.7	1,330.3	9,066.5	0.00	0.00	0.00
16,350.0	90.00	180.10	7,100.0	-8,994.7	1,330.3	9,091.3	0.00	0.00	0.00
16,375.0	90.00	180.10	7,100.0	-9,019.7	1,330.2	9,116.1	0.00	0.00	0.00
16,400.0	90.00	180.10	7,100.0	-9,044.7	1,330.2	9,140.8	0.00	0.00	0.00
16,425.0	90.00	180.10	7,100.0	-9,069.7	1,330.1	9,165.6	0.00	0.00	0.00
16,450.0	90.00	180.10	7,100.0	-9,094.7	1,330.1	9,190.4	0.00	0.00	0.00
16,475.0	90.00	180.10	7,100.0	-9,119.7	1,330.0	9,215.2	0.00	0.00	0.00
16,500.0	90.00	180.10	7,100.0	-9,144.7	1,330.0	9,240.0	0.00	0.00	0.00
16,525.0	90.00	180.10	7,100.0	-9,169.7	1,329.9	9,264.8	0.00	0.00	0.00
16,550.0	90.00	180.10	7,100.0	-9,194.7	1,329.9	9,289.5	0.00	0.00	0.00
16,575.0	90.00	180.10	7,100.0	-9,219.7	1,329.9	9,314.3	0.00	0.00	0.00
16,600.0	90.00	180.10	7,100.0	-9,244.7	1,329.8	9,339.1	0.00	0.00	0.00
16,625.0	90.00	180.10	7,100.0	-9,269.7	1,329.8	9,363.9	0.00	0.00	0.00
16,650.0	90.00	180.10	7,100.0	-9,294.7	1,329.7	9,388.7	0.00	0.00	0.00
16,675.0	90.00	180.10	7,100.0	-9,319.7	1,329.7	9,413.5	0.00	0.00	0.00
16,700.0	90.00	180.10	7,100.0	-9,344.7	1,329.6	9,438.2	0.00	0.00	0.00
16,725.0	90.00	180.10	7,100.0	-9,369.7	1,329.6	9,463.0	0.00	0.00	0.00
16,750.0	90.00	180.10	7,100.0	-9,394.7	1,329.5	9,487.8	0.00	0.00	0.00
16,775.0	90.00	180.10	7,100.0	-9,419.7	1,329.5	9,512.6	0.00	0.00	0.00
16,800.0	90.00	180.10	7,100.0	-9,444.7	1,329.5	9,537.4	0.00	0.00	0.00
16,825.0	90.00	180.10	7,100.0	-9,469.7	1,329.4	9,562.2	0.00	0.00	0.00
16,850.0	90.00	180.10	7,100.0	-9,494.7	1,329.4	9,586.9	0.00	0.00	0.00
16,875.0	90.00	180.10	7,100.0	-9,519.7	1,329.3	9,611.7	0.00	0.00	0.00
16,900.0	90.00	180.10	7,100.0	-9,544.7	1,329.3	9,636.5	0.00	0.00	0.00
16,925.0	90.00	180.10	7,100.0	-9,569.7	1,329.2	9,661.3	0.00	0.00	0.00
16,950.0	90.00	180.10	7,100.0	-9,594.7	1,329.2	9,686.1	0.00	0.00	0.00
16,975.0	90.00	180.10	7,100.0	-9,619.7	1,329.2	9,710.9	0.00	0.00	0.00
17,000.0	90.00	180.10	7,100.0	-9,644.7	1,329.1	9,735.6	0.00	0.00	0.00
17,025.0	90.00	180.10	7,100.0	-9,669.7	1,329.1	9,760.4	0.00	0.00	0.00
17,050.0	90.00	180.10	7,100.0	-9,694.7	1,329.0	9,785.2	0.00	0.00	0.00
17,075.0	90.00	180.10	7,100.0	-9,719.7	1,329.0	9,810.0	0.00	0.00	0.00
17,100.0	90.00	180.10	7,100.0	-9,744.7	1,328.9	9,834.8	0.00	0.00	0.00
17,125.0	90.00	180.10	7,100.0	-9,769.7	1,328.9	9,859.6	0.00	0.00	0.00
17,150.0	90.00	180.10	7,100.0	-9,794.7	1,328.8	9,884.3	0.00	0.00	0.00
17,175.0	90.00	180.10	7,100.0	-9,819.7	1,328.8	9,909.1	0.00	0.00	0.00
17,200.0	90.00	180.10	7,100.0	-9,844.7	1,328.8	9,933.9	0.00	0.00	0.00
17,225.0	90.00	180.10	7,100.0	-9,869.7	1,328.7	9,958.7	0.00	0.00	0.00
17,250.0	90.00	180.10	7,100.0	-9,894.7	1,328.7	9,983.5	0.00	0.00	0.00
17,275.0	90.00	180.10	7,100.0	-9,919.7	1,328.6	10,008.3	0.00	0.00	0.00
17,300.0	90.00	180.10	7,100.0	-9,944.7	1,328.6	10,033.0	0.00	0.00	0.00
17,325.0	90.00	180.10	7,100.0	-9,969.7	1,328.5	10,057.8	0.00	0.00	0.00
17,350.0	90.00	180.10	7,100.0	-9,994.7	1,328.5	10,082.6	0.00	0.00	0.00
17,375.0	90.00	180.10	7,100.0	-10,019.7	1,328.4	10,107.4	0.00	0.00	0.00

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Castle 0780 4-17H20
Project:	North Park Basin	TVD Reference:	WELL @ 8172.0usft (Original Well Elev)
Site:	T7N-R80W-S17	MD Reference:	WELL @ 8172.0usft (Original Well Elev)
Well:	Castle 0780 4-17H20	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)
17,400.0	90.00	180.10	7,100.0	-10,044.7	1,328.4	10,132.2	0.00	0.00	0.00
17,425.0	90.00	180.10	7,100.0	-10,069.7	1,328.4	10,157.0	0.00	0.00	0.00
17,450.0	90.00	180.10	7,100.0	-10,094.7	1,328.3	10,181.7	0.00	0.00	0.00
17,475.0	90.00	180.10	7,100.0	-10,119.7	1,328.3	10,206.5	0.00	0.00	0.00
17,500.0	90.00	180.10	7,100.0	-10,144.7	1,328.2	10,231.3	0.00	0.00	0.00
17,522.7	90.00	180.10	7,100.0	-10,167.4	1,328.2	10,253.8	0.00	0.00	0.00

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									
Castle 4-17H20	0.00	0.00	7,100.0	-10,167.4	1,328.2	1,446,794.73	2,750,159.04	40° 33' 22.947 N	106° 23' 56.944 W
- plan hits target center									
- Point									

Checked By: _____ Approved By: _____ Date: _____