



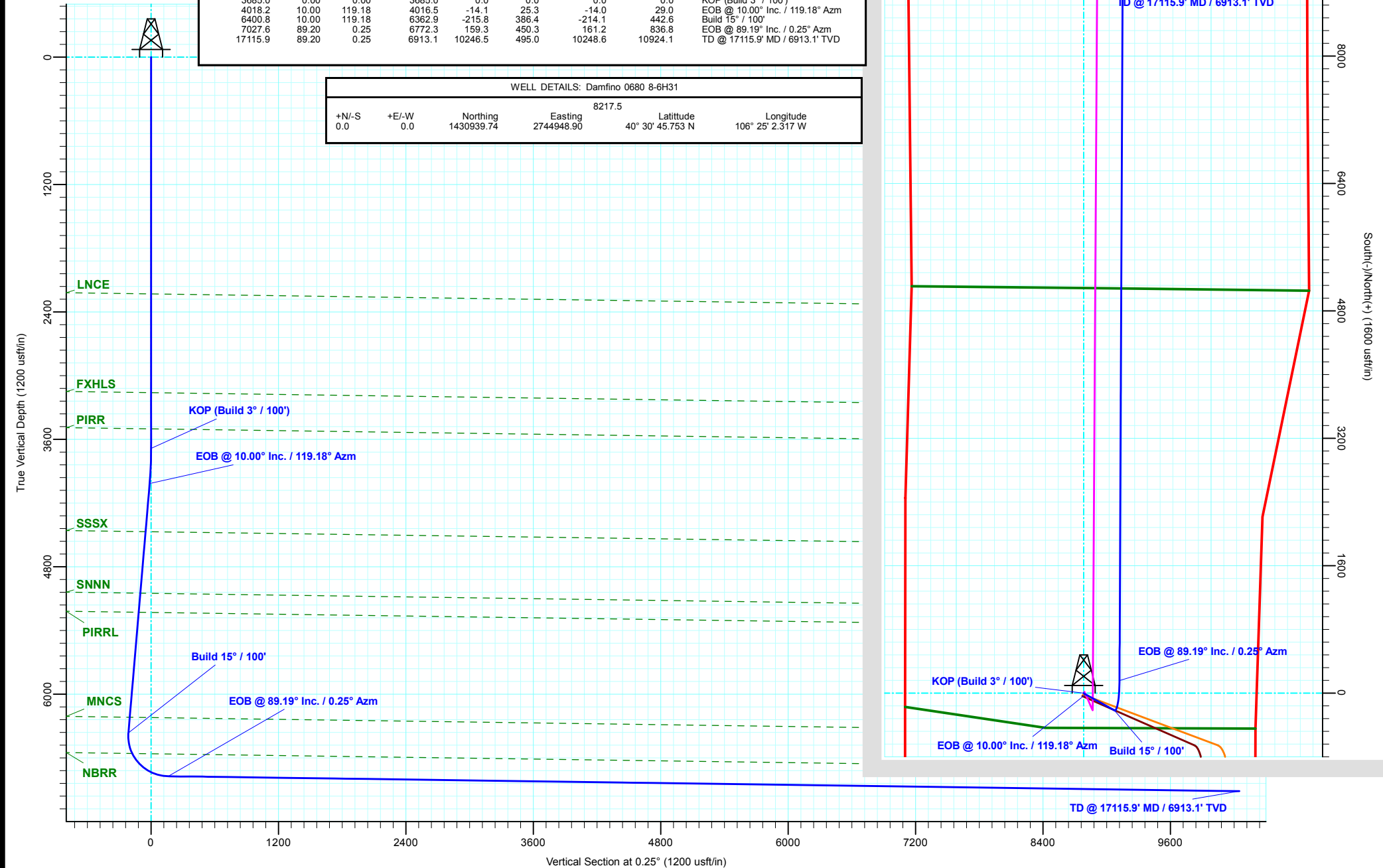
SandRidge Energy
Jackson County, Colorado
Sec 6, T6N, R80W, 6th PM
Damfino 0680 8-6H31
Design #1
Cyclone #33

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
3685.0	0.00	0.00	3685.0	0.0	0.0	0.0	0.0	KOP (Build 3° / 100')
4018.2	10.00	119.18	4016.5	-14.1	25.3	-14.0	29.0	EOB @ 10.00° Inc. / 119.18° Azm
6400.8	10.00	119.18	6362.9	-215.8	386.4	-214.1	442.6	Build 15° / 100'
7027.6	89.20	0.25	6772.3	159.3	450.3	161.2	836.8	EOB @ 89.19° Inc. / 0.25° Azm
17115.9	89.20	0.25	6913.1	10246.5	495.0	10248.6	10924.1	TD @ 17115.9' MD / 6913.1' TVD

WELL DETAILS: Damfino 0680 8-6H31

8217.5						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	1430939.74	2744948.90	40° 30' 45.753 N	106° 25' 2.317 W	





SandRidge Energy

**Jackson County, Colorado
Sec 6, T6N, R80W, 6th PM
Damfino 0680 8-6H31**

Wellbore #1

Plan: Design #1

QES Well Planning Report

02 October, 2018



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Damfino 0680 8-6H31
Company:	SandRidge Energy	TVD Reference:	RKB @ 8243.5usft (Cylcone #33)
Project:	Jackson County, Colorado	MD Reference:	RKB @ 8243.5usft (Cylcone #33)
Site:	Sec 6, T6N, R80W, 6th PM	North Reference:	True
Well:	Damfino 0680 8-6H31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Jackson County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Sec 6, T6N, R80W, 6th PM				
Site Position:		Northing:	1,430,957.42 usft	Latitude:	40° 30' 45.929 N
From:	Map	Easting:	2,744,958.23 usft	Longitude:	106° 25' 2.198 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.59 °

Well	Damfino 0680 8-6H31					
Well Position	+N/-S	-17.8 usft	Northing:	1,430,939.74 usft	Latitude:	40° 30' 45.753 N
	+E/-W	-9.1 usft	Easting:	2,744,948.90 usft	Longitude:	106° 25' 2.317 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	8,217.5 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/27/2018	8.94	66.65	52,096.30802748

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	0.25

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,685.0	0.00	0.00	3,685.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,018.2	10.00	119.18	4,016.5	-14.1	25.3	3.00	3.00	0.00	119.18	
6,400.8	10.00	119.18	6,362.9	-215.8	386.4	0.00	0.00	0.00	0.00	
7,027.6	89.20	0.25	6,772.3	159.3	450.3	15.00	12.64	-18.97	-118.68	
17,115.9	89.20	0.25	6,913.1	10,246.5	495.0	0.00	0.00	0.00	0.00	PBHL - Damfino 06

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Project:	Jackson County, Colorado	MD Reference:	RKB @ 8243.5usft (Cylcone #33)
Site:	Sec 6, T6N, R80W, 6th PM	North Reference:	True
Well:	Damfino 0680 8-6H31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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
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
LNCE									
2,230.0	0.00	0.00	2,230.0	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
FXHLS									
3,160.0	0.00	0.00	3,160.0	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
PIRR									
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	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP (Build 3° / 100')									
3,685.0	0.00	0.00	3,685.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.45	119.18	3,700.0	0.0	0.1	0.0	3.00	3.00	0.00
3,800.0	3.45	119.18	3,799.9	-1.7	3.0	-1.7	3.00	3.00	0.00
3,900.0	6.45	119.18	3,899.5	-5.9	10.6	-5.8	3.00	3.00	0.00
4,000.0	9.45	119.18	3,998.6	-12.6	22.6	-12.5	3.00	3.00	0.00
EOB @ 10.00° Inc. / 119.18° Azm									
4,018.2	10.00	119.18	4,016.5	-14.1	25.3	-14.0	3.00	3.00	0.00
4,100.0	10.00	119.18	4,097.1	-21.1	37.7	-20.9	0.00	0.00	0.00
4,200.0	10.00	119.18	4,195.6	-29.5	52.9	-29.3	0.00	0.00	0.00
4,300.0	10.00	119.18	4,294.0	-38.0	68.0	-37.7	0.00	0.00	0.00
4,400.0	10.00	119.18	4,392.5	-46.5	83.2	-46.1	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Damfino 0680 8-6H31
Company:	SandRidge Energy	TVD Reference:	RKB @ 8243.5usft (Cylcone #33)
Project:	Jackson County, Colorado	MD Reference:	RKB @ 8243.5usft (Cylcone #33)
Site:	Sec 6, T6N, R80W, 6th PM	North Reference:	True
Well:	Damfino 0680 8-6H31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
SSSX									
4,477.9	10.00	119.18	4,469.3	-53.0	95.0	-52.6	0.00	0.00	0.00
4,500.0	10.00	119.18	4,491.0	-54.9	98.3	-54.5	0.00	0.00	0.00
4,600.0	10.00	119.18	4,589.5	-63.4	113.5	-62.9	0.00	0.00	0.00
4,700.0	10.00	119.18	4,688.0	-71.8	128.6	-71.3	0.00	0.00	0.00
4,800.0	10.00	119.18	4,786.4	-80.3	143.8	-79.7	0.00	0.00	0.00
4,900.0	10.00	119.18	4,884.9	-88.8	158.9	-88.1	0.00	0.00	0.00
5,000.0	10.00	119.18	4,983.4	-97.2	174.1	-96.5	0.00	0.00	0.00
SNNN									
5,066.2	10.00	119.18	5,048.6	-102.8	184.1	-102.0	0.00	0.00	0.00
5,100.0	10.00	119.18	5,081.9	-105.7	189.3	-104.9	0.00	0.00	0.00
5,200.0	10.00	119.18	5,180.4	-114.2	204.4	-113.3	0.00	0.00	0.00
PIRRL									
5,248.7	10.00	119.18	5,228.4	-118.3	211.8	-117.4	0.00	0.00	0.00
5,300.0	10.00	119.18	5,278.9	-122.6	219.6	-121.7	0.00	0.00	0.00
5,400.0	10.00	119.18	5,377.3	-131.1	234.7	-130.1	0.00	0.00	0.00
5,500.0	10.00	119.18	5,475.8	-139.6	249.9	-138.5	0.00	0.00	0.00
5,600.0	10.00	119.18	5,574.3	-148.0	265.0	-146.9	0.00	0.00	0.00
5,700.0	10.00	119.18	5,672.8	-156.5	280.2	-155.3	0.00	0.00	0.00
5,800.0	10.00	119.18	5,771.3	-164.9	295.3	-163.7	0.00	0.00	0.00
5,900.0	10.00	119.18	5,869.7	-173.4	310.5	-172.1	0.00	0.00	0.00
6,000.0	10.00	119.18	5,968.2	-181.9	325.6	-180.5	0.00	0.00	0.00
6,100.0	10.00	119.18	6,066.7	-190.3	340.8	-188.9	0.00	0.00	0.00
6,200.0	10.00	119.18	6,165.2	-198.8	355.9	-197.2	0.00	0.00	0.00
MNCS									
6,252.8	10.00	119.18	6,217.2	-203.3	363.9	-201.7	0.00	0.00	0.00
6,300.0	10.00	119.18	6,263.7	-207.3	371.1	-205.6	0.00	0.00	0.00
Build 15° / 100'									
6,400.8	10.00	119.18	6,362.9	-215.8	386.4	-214.1	0.00	0.00	0.00
6,425.0	8.84	98.00	6,386.8	-217.1	390.1	-215.4	15.00	-4.77	-87.54
6,450.0	9.12	73.87	6,411.5	-216.8	393.9	-215.1	15.00	1.11	-96.55
6,475.0	10.77	54.22	6,436.2	-214.9	397.7	-213.1	15.00	6.61	-78.60
6,500.0	13.30	40.82	6,460.6	-211.3	401.4	-209.6	15.00	10.10	-53.59
6,525.0	16.29	31.94	6,484.8	-206.2	405.2	-204.4	15.00	11.99	-35.51
6,550.0	19.55	25.85	6,508.6	-199.4	408.9	-197.7	15.00	13.01	-24.36
6,575.0	22.95	21.47	6,531.9	-191.1	412.5	-189.3	15.00	13.60	-17.51
6,600.0	26.44	18.18	6,554.6	-181.3	416.0	-179.5	15.00	13.96	-13.16
NBRR									
6,603.3	26.90	17.81	6,557.5	-179.9	416.4	-178.1	15.00	14.11	-11.34
6,625.0	29.99	15.62	6,576.6	-170.0	419.4	-168.2	15.00	14.21	-10.10
6,650.0	33.58	13.55	6,597.9	-157.3	422.7	-155.4	15.00	14.36	-8.26
6,675.0	37.19	11.84	6,618.2	-143.1	425.9	-141.3	15.00	14.47	-6.83
6,700.0	40.83	10.40	6,637.7	-127.7	428.9	-125.8	15.00	14.55	-5.78
6,725.0	44.49	9.16	6,656.0	-111.0	431.8	-109.1	15.00	14.62	-4.98
6,750.0	48.15	8.06	6,673.3	-93.1	434.5	-91.2	15.00	14.66	-4.37
6,775.0	51.83	7.09	6,689.4	-74.2	437.0	-72.3	15.00	14.70	-3.90
6,800.0	55.51	6.21	6,704.2	-54.2	439.3	-52.2	15.00	14.73	-3.52
6,825.0	59.20	5.40	6,717.7	-33.2	441.4	-31.3	15.00	14.75	-3.22
6,850.0	62.89	4.65	6,729.8	-11.4	443.4	-9.5	15.00	14.77	-2.99
6,875.0	66.59	3.96	6,740.4	11.1	445.1	13.1	15.00	14.79	-2.79
6,900.0	70.29	3.30	6,749.6	34.3	446.5	36.3	15.00	14.80	-2.64
6,925.0	73.99	2.66	6,757.3	58.1	447.8	60.0	15.00	14.81	-2.52
6,950.0	77.69	2.06	6,763.4	82.3	448.8	84.2	15.00	14.81	-2.43

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Wellbore:	Wellbore #1		
Design:	Design #1		

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)
6,975.0	81.40	1.47	6,767.9	106.9	449.5	108.8	15.00	14.82	-2.36
7,000.0	85.10	0.89	6,770.9	131.7	450.0	133.6	15.00	14.82	-2.32
7,025.0	88.81	0.31	6,772.2	156.6	450.3	158.6	15.00	14.82	-2.29
EOB @ 89.19° Inc. / 0.25° Azm									
7,027.6	89.20	0.25	6,772.3	159.3	450.3	161.2	15.00	14.83	-2.28
7,100.0	89.20	0.25	6,773.3	231.6	450.6	233.6	0.00	0.00	0.00
7,200.0	89.20	0.25	6,774.7	331.6	451.1	333.6	0.00	0.00	0.00
7,300.0	89.20	0.25	6,776.1	431.6	451.5	433.6	0.00	0.00	0.00
7,400.0	89.20	0.25	6,777.5	531.6	451.9	533.6	0.00	0.00	0.00
7,500.0	89.20	0.25	6,778.8	631.6	452.4	633.5	0.00	0.00	0.00
7,600.0	89.20	0.25	6,780.2	731.6	452.8	733.5	0.00	0.00	0.00
7,700.0	89.20	0.25	6,781.6	831.6	453.3	833.5	0.00	0.00	0.00
7,800.0	89.20	0.25	6,783.0	931.5	453.7	933.5	0.00	0.00	0.00
7,900.0	89.20	0.25	6,784.4	1,031.5	454.2	1,033.5	0.00	0.00	0.00
8,000.0	89.20	0.25	6,785.8	1,131.5	454.6	1,133.5	0.00	0.00	0.00
8,100.0	89.20	0.25	6,787.2	1,231.5	455.0	1,233.5	0.00	0.00	0.00
8,200.0	89.20	0.25	6,788.6	1,331.5	455.5	1,333.5	0.00	0.00	0.00
8,300.0	89.20	0.25	6,790.0	1,431.5	455.9	1,433.5	0.00	0.00	0.00
8,400.0	89.20	0.25	6,791.4	1,531.5	456.4	1,533.5	0.00	0.00	0.00
8,500.0	89.20	0.25	6,792.8	1,631.5	456.8	1,633.4	0.00	0.00	0.00
8,600.0	89.20	0.25	6,794.2	1,731.5	457.3	1,733.4	0.00	0.00	0.00
8,700.0	89.20	0.25	6,795.6	1,831.4	457.7	1,833.4	0.00	0.00	0.00
8,800.0	89.20	0.25	6,797.0	1,931.4	458.1	1,933.4	0.00	0.00	0.00
8,900.0	89.20	0.25	6,798.4	2,031.4	458.6	2,033.4	0.00	0.00	0.00
9,000.0	89.20	0.25	6,799.8	2,131.4	459.0	2,133.4	0.00	0.00	0.00
9,100.0	89.20	0.25	6,801.2	2,231.4	459.5	2,233.4	0.00	0.00	0.00
9,200.0	89.20	0.25	6,802.6	2,331.4	459.9	2,333.4	0.00	0.00	0.00
9,300.0	89.20	0.25	6,804.0	2,431.4	460.4	2,433.4	0.00	0.00	0.00
9,400.0	89.20	0.25	6,805.4	2,531.4	460.8	2,533.4	0.00	0.00	0.00
9,500.0	89.20	0.25	6,806.8	2,631.4	461.2	2,633.3	0.00	0.00	0.00
9,600.0	89.20	0.25	6,808.2	2,731.4	461.7	2,733.3	0.00	0.00	0.00
9,700.0	89.20	0.25	6,809.6	2,831.3	462.1	2,833.3	0.00	0.00	0.00
9,800.0	89.20	0.25	6,811.0	2,931.3	462.6	2,933.3	0.00	0.00	0.00
9,900.0	89.20	0.25	6,812.4	3,031.3	463.0	3,033.3	0.00	0.00	0.00
10,000.0	89.20	0.25	6,813.8	3,131.3	463.5	3,133.3	0.00	0.00	0.00
10,100.0	89.20	0.25	6,815.1	3,231.3	463.9	3,233.3	0.00	0.00	0.00
10,200.0	89.20	0.25	6,816.5	3,331.3	464.4	3,333.3	0.00	0.00	0.00
10,300.0	89.20	0.25	6,817.9	3,431.3	464.8	3,433.3	0.00	0.00	0.00
10,400.0	89.20	0.25	6,819.3	3,531.3	465.2	3,533.3	0.00	0.00	0.00
10,500.0	89.20	0.25	6,820.7	3,631.3	465.7	3,633.3	0.00	0.00	0.00
10,600.0	89.20	0.25	6,822.1	3,731.2	466.1	3,733.2	0.00	0.00	0.00
10,700.0	89.20	0.25	6,823.5	3,831.2	466.6	3,833.2	0.00	0.00	0.00
10,800.0	89.20	0.25	6,824.9	3,931.2	467.0	3,933.2	0.00	0.00	0.00
10,900.0	89.20	0.25	6,826.3	4,031.2	467.5	4,033.2	0.00	0.00	0.00
11,000.0	89.20	0.25	6,827.7	4,131.2	467.9	4,133.2	0.00	0.00	0.00
11,100.0	89.20	0.25	6,829.1	4,231.2	468.3	4,233.2	0.00	0.00	0.00
11,200.0	89.20	0.25	6,830.5	4,331.2	468.8	4,333.2	0.00	0.00	0.00
11,300.0	89.20	0.25	6,831.9	4,431.2	469.2	4,433.2	0.00	0.00	0.00
11,400.0	89.20	0.25	6,833.3	4,531.2	469.7	4,533.2	0.00	0.00	0.00
11,500.0	89.20	0.25	6,834.7	4,631.1	470.1	4,633.2	0.00	0.00	0.00
11,600.0	89.20	0.25	6,836.1	4,731.1	470.6	4,733.1	0.00	0.00	0.00
11,700.0	89.20	0.25	6,837.5	4,831.1	471.0	4,833.1	0.00	0.00	0.00
11,800.0	89.20	0.25	6,838.9	4,931.1	471.4	4,933.1	0.00	0.00	0.00
11,900.0	89.20	0.25	6,840.3	5,031.1	471.9	5,033.1	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Damfino 0680 8-6H31
Company:	SandRidge Energy	TVD Reference:	RKB @ 8243.5usft (Cylcone #33)
Project:	Jackson County, Colorado	MD Reference:	RKB @ 8243.5usft (Cylcone #33)
Site:	Sec 6, T6N, R80W, 6th PM	North Reference:	True
Well:	Damfino 0680 8-6H31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,000.0	89.20	0.25	6,841.7	5,131.1	472.3	5,133.1	0.00	0.00	0.00
12,100.0	89.20	0.25	6,843.1	5,231.1	472.8	5,233.1	0.00	0.00	0.00
12,200.0	89.20	0.25	6,844.5	5,331.1	473.2	5,333.1	0.00	0.00	0.00
12,300.0	89.20	0.25	6,845.9	5,431.1	473.7	5,433.1	0.00	0.00	0.00
12,400.0	89.20	0.25	6,847.3	5,531.0	474.1	5,533.1	0.00	0.00	0.00
12,500.0	89.20	0.25	6,848.7	5,631.0	474.5	5,633.1	0.00	0.00	0.00
12,600.0	89.20	0.25	6,850.1	5,731.0	475.0	5,733.0	0.00	0.00	0.00
12,700.0	89.20	0.25	6,851.5	5,831.0	475.4	5,833.0	0.00	0.00	0.00
12,800.0	89.20	0.25	6,852.8	5,931.0	475.9	5,933.0	0.00	0.00	0.00
12,900.0	89.20	0.25	6,854.2	6,031.0	476.3	6,033.0	0.00	0.00	0.00
13,000.0	89.20	0.25	6,855.6	6,131.0	476.8	6,133.0	0.00	0.00	0.00
13,100.0	89.20	0.25	6,857.0	6,231.0	477.2	6,233.0	0.00	0.00	0.00
13,200.0	89.20	0.25	6,858.4	6,331.0	477.6	6,333.0	0.00	0.00	0.00
13,300.0	89.20	0.25	6,859.8	6,431.0	478.1	6,433.0	0.00	0.00	0.00
13,400.0	89.20	0.25	6,861.2	6,530.9	478.5	6,533.0	0.00	0.00	0.00
13,500.0	89.20	0.25	6,862.6	6,630.9	479.0	6,633.0	0.00	0.00	0.00
13,600.0	89.20	0.25	6,864.0	6,730.9	479.4	6,732.9	0.00	0.00	0.00
13,700.0	89.20	0.25	6,865.4	6,830.9	479.9	6,832.9	0.00	0.00	0.00
13,800.0	89.20	0.25	6,866.8	6,930.9	480.3	6,932.9	0.00	0.00	0.00
13,900.0	89.20	0.25	6,868.2	7,030.9	480.7	7,032.9	0.00	0.00	0.00
14,000.0	89.20	0.25	6,869.6	7,130.9	481.2	7,132.9	0.00	0.00	0.00
14,100.0	89.20	0.25	6,871.0	7,230.9	481.6	7,232.9	0.00	0.00	0.00
14,200.0	89.20	0.25	6,872.4	7,330.9	482.1	7,332.9	0.00	0.00	0.00
14,300.0	89.20	0.25	6,873.8	7,430.8	482.5	7,432.9	0.00	0.00	0.00
14,400.0	89.20	0.25	6,875.2	7,530.8	483.0	7,532.9	0.00	0.00	0.00
14,500.0	89.20	0.25	6,876.6	7,630.8	483.4	7,632.9	0.00	0.00	0.00
14,600.0	89.20	0.25	6,878.0	7,730.8	483.8	7,732.9	0.00	0.00	0.00
14,700.0	89.20	0.25	6,879.4	7,830.8	484.3	7,832.8	0.00	0.00	0.00
14,800.0	89.20	0.25	6,880.8	7,930.8	484.7	7,932.8	0.00	0.00	0.00
14,900.0	89.20	0.25	6,882.2	8,030.8	485.2	8,032.8	0.00	0.00	0.00
15,000.0	89.20	0.25	6,883.6	8,130.8	485.6	8,132.8	0.00	0.00	0.00
15,100.0	89.20	0.25	6,885.0	8,230.8	486.1	8,232.8	0.00	0.00	0.00
15,200.0	89.20	0.25	6,886.4	8,330.7	486.5	8,332.8	0.00	0.00	0.00
15,300.0	89.20	0.25	6,887.8	8,430.7	486.9	8,432.8	0.00	0.00	0.00
15,400.0	89.20	0.25	6,889.1	8,530.7	487.4	8,532.8	0.00	0.00	0.00
15,500.0	89.20	0.25	6,890.5	8,630.7	487.8	8,632.8	0.00	0.00	0.00
15,600.0	89.20	0.25	6,891.9	8,730.7	488.3	8,732.8	0.00	0.00	0.00
15,700.0	89.20	0.25	6,893.3	8,830.7	488.7	8,832.7	0.00	0.00	0.00
15,800.0	89.20	0.25	6,894.7	8,930.7	489.2	8,932.7	0.00	0.00	0.00
15,900.0	89.20	0.25	6,896.1	9,030.7	489.6	9,032.7	0.00	0.00	0.00
16,000.0	89.20	0.25	6,897.5	9,130.7	490.0	9,132.7	0.00	0.00	0.00
16,100.0	89.20	0.25	6,898.9	9,230.7	490.5	9,232.7	0.00	0.00	0.00
16,200.0	89.20	0.25	6,900.3	9,330.6	490.9	9,332.7	0.00	0.00	0.00
16,300.0	89.20	0.25	6,901.7	9,430.6	491.4	9,432.7	0.00	0.00	0.00
16,400.0	89.20	0.25	6,903.1	9,530.6	491.8	9,532.7	0.00	0.00	0.00
16,500.0	89.20	0.25	6,904.5	9,630.6	492.3	9,632.7	0.00	0.00	0.00
16,600.0	89.20	0.25	6,905.9	9,730.6	492.7	9,732.7	0.00	0.00	0.00
16,700.0	89.20	0.25	6,907.3	9,830.6	493.1	9,832.6	0.00	0.00	0.00
16,800.0	89.20	0.25	6,908.7	9,930.6	493.6	9,932.6	0.00	0.00	0.00
16,900.0	89.20	0.25	6,910.1	10,030.6	494.0	10,032.6	0.00	0.00	0.00
17,000.0	89.20	0.25	6,911.5	10,130.6	494.5	10,132.6	0.00	0.00	0.00
17,100.0	89.20	0.25	6,912.9	10,230.5	494.9	10,232.6	0.00	0.00	0.00
TD @ 17115.9' MD / 6913.1' TVD									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Damfino 0680 8-6H31
Company:	SandRidge Energy	TVD Reference:	RKB @ 8243.5usft (Cylcone #33)
Project:	Jackson County, Colorado	MD Reference:	RKB @ 8243.5usft (Cylcone #33)
Site:	Sec 6, T6N, R80W, 6th PM	North Reference:	True
Well:	Damfino 0680 8-6H31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
17,115.9	89.20	0.25	6,913.1	10,246.5	495.0	10,248.6	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									
PBHL - Damfino 0680	0.00	0.00	6,913.1	10,246.5	495.0	1,441,180.56	2,745,549.86	40° 32' 27.006 N	106° 24' 55.905 W
- plan hits target center									
- Point									

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,230.0	2,230.0	LNCE		0.80	0.25
3,160.0	3,160.0	FXHLS		0.80	0.25
3,500.0	3,500.0	PIRR		0.80	0.25
4,477.9	4,469.3	SSSX		0.80	0.25
5,066.2	5,048.6	SNNN		0.80	0.25
5,248.7	5,228.4	PIRRL		0.80	0.25
6,252.8	6,217.2	MNCS		0.80	0.25
6,603.3	6,557.5	NBRR		0.80	0.25

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,685.0	3,685.0	0.0	0.0	KOP (Build 3° / 100')
4,018.2	4,016.5	-14.1	25.3	EOB @ 10.00° Inc. / 119.18° Azm
6,400.8	6,362.9	-215.8	386.4	Build 15° / 100'
7,027.6	6,772.3	159.3	450.3	EOB @ 89.19° Inc. / 0.25° Azm
17,115.9	6,913.1	10,246.5	495.0	TD @ 17115.9' MD / 6913.1' TVD