

SandRidge Energy

North Park Basin

T7N-R80W-S18

Coalmont 0781 1-13H

Wellbore #1

Plan: Design #1

Standard Survey Report

15 July, 2016

SandRidge Energy

Survey Report

Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Coalmont 0781 1-13H
Project:	North Park Basin	TVD Reference:	WELL @ 8222.0usft (Original Well Elev)
Site:	T7N-R80W-S18	MD Reference:	WELL @ 8222.0usft (Original Well Elev)
Well:	Coalmont 0781 1-13H	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-S18				
Site Position:		Northing:	1,456,963.79 usft	Latitude:	40° 35' 2.980 N
From:	Lat/Long	Easting:	2,745,723.26 usft	Longitude:	106° 24' 55.770 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.59 °

Well	Coalmont 0781 1-13H					
Well Position	+N/-S	0.0 usft	Northing:	1,452,411.90 usft	Latitude:	40° 34' 17.742 N
	+E/-W	0.0 usft	Easting:	2,743,180.38 usft	Longitude:	106° 25' 28.112 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,206.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	9.90	66.96	53,179

Design	Design #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	0.00	

Survey Tool Program	Date	7/7/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,376.8	Design #1 (Wellbore #1)	Sperry MWD	Fixed:v2:standard declination	

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
2,900.0	2.00	226.31	2,900.0	-1.2	-1.3	-1.2	2.00	2.00	0.00
3,000.0	4.00	226.31	2,999.8	-4.8	-5.0	-4.8	2.00	2.00	0.00
3,100.0	6.00	226.31	3,099.5	-10.8	-11.3	-10.8	2.00	2.00	0.00
3,200.0	8.00	226.31	3,198.7	-19.3	-20.2	-19.3	2.00	2.00	0.00
3,300.0	10.00	226.31	3,297.5	-30.1	-31.5	-30.1	2.00	2.00	0.00
3,383.4	11.67	226.31	3,379.4	-40.9	-42.8	-40.9	2.00	2.00	0.00
Start 2463.2 hold at 3383.4 MD									
3,400.0	11.67	226.31	3,395.6	-43.2	-45.2	-43.2	0.00	0.00	0.00
3,500.0	11.67	226.31	3,493.6	-57.2	-59.9	-57.2	0.00	0.00	0.00
3,600.0	11.67	226.31	3,591.5	-71.2	-74.5	-71.2	0.00	0.00	0.00
3,700.0	11.67	226.31	3,689.4	-85.1	-89.1	-85.1	0.00	0.00	0.00
3,800.0	11.67	226.31	3,787.4	-99.1	-103.7	-99.1	0.00	0.00	0.00
3,900.0	11.67	226.31	3,885.3	-113.1	-118.3	-113.1	0.00	0.00	0.00
4,000.0	11.67	226.31	3,983.2	-127.0	-133.0	-127.0	0.00	0.00	0.00
4,100.0	11.67	226.31	4,081.2	-141.0	-147.6	-141.0	0.00	0.00	0.00
4,200.0	11.67	226.31	4,179.1	-155.0	-162.2	-155.0	0.00	0.00	0.00
4,300.0	11.67	226.31	4,277.0	-168.9	-176.8	-168.9	0.00	0.00	0.00
4,400.0	11.67	226.31	4,375.0	-182.9	-191.5	-182.9	0.00	0.00	0.00
4,500.0	11.67	226.31	4,472.9	-196.9	-206.1	-196.9	0.00	0.00	0.00
4,600.0	11.67	226.31	4,570.8	-210.8	-220.7	-210.8	0.00	0.00	0.00
4,700.0	11.67	226.31	4,668.8	-224.8	-235.3	-224.8	0.00	0.00	0.00
4,800.0	11.67	226.31	4,766.7	-238.8	-250.0	-238.8	0.00	0.00	0.00
4,900.0	11.67	226.31	4,864.6	-252.8	-264.6	-252.8	0.00	0.00	0.00
5,000.0	11.67	226.31	4,962.6	-266.7	-279.2	-266.7	0.00	0.00	0.00

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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	11.67	226.31	5,060.5	-280.7	-293.8	-280.7	0.00	0.00	0.00
5,200.0	11.67	226.31	5,158.4	-294.7	-308.4	-294.7	0.00	0.00	0.00
5,300.0	11.67	226.31	5,256.4	-308.6	-323.1	-308.6	0.00	0.00	0.00
5,400.0	11.67	226.31	5,354.3	-322.6	-337.7	-322.6	0.00	0.00	0.00
5,500.0	11.67	226.31	5,452.2	-336.6	-352.3	-336.6	0.00	0.00	0.00
5,600.0	11.67	226.31	5,550.2	-350.5	-366.9	-350.5	0.00	0.00	0.00
5,700.0	11.67	226.31	5,648.1	-364.5	-381.6	-364.5	0.00	0.00	0.00
5,800.0	11.67	226.31	5,746.0	-378.5	-396.2	-378.5	0.00	0.00	0.00
5,846.6	11.67	226.31	5,791.7	-385.0	-403.0	-385.0	0.00	0.00	0.00
Start DLS 8.00 TFO 137.62									
5,850.0	11.47	227.22	5,795.0	-385.5	-403.5	-385.5	8.00	-5.87	27.12
5,900.0	8.98	245.06	5,844.2	-390.5	-410.7	-390.5	8.00	-4.98	35.68
5,950.0	7.84	271.57	5,893.7	-392.0	-417.6	-392.0	8.00	-2.27	53.01
6,000.0	8.62	299.28	5,943.2	-390.1	-424.3	-390.1	8.00	1.54	55.43
6,050.0	10.90	318.90	5,992.5	-384.7	-430.7	-384.7	8.00	4.56	39.24
6,100.0	13.96	330.93	6,041.3	-375.9	-436.7	-375.9	8.00	6.14	24.06
6,150.0	17.41	338.50	6,089.5	-363.6	-442.4	-363.6	8.00	6.89	15.13
6,200.0	21.05	343.58	6,136.7	-348.1	-447.7	-348.1	8.00	7.27	10.15
6,250.0	24.79	347.20	6,182.7	-329.2	-452.6	-329.2	8.00	7.49	7.24
6,300.0	28.60	349.91	6,227.4	-307.2	-457.0	-307.2	8.00	7.62	5.43
6,350.0	32.46	352.03	6,270.4	-282.1	-460.9	-282.1	8.00	7.71	4.24
6,400.0	36.34	353.75	6,311.7	-254.1	-464.4	-254.1	8.00	7.76	3.43
6,446.2	39.94	355.07	6,348.0	-225.7	-467.2	-225.7	8.00	7.80	2.86
Niobrara									
6,450.0	40.24	355.17	6,350.9	-223.3	-467.4	-223.3	8.00	7.82	2.63
6,500.0	44.16	356.38	6,388.0	-189.8	-469.8	-189.8	8.00	7.83	2.42
6,550.0	48.08	357.43	6,422.6	-153.8	-471.8	-153.8	8.00	7.86	2.10
6,600.0	52.02	358.36	6,454.7	-115.5	-473.2	-115.5	8.00	7.87	1.86
6,650.0	55.96	359.19	6,484.1	-75.1	-474.0	-75.1	8.00	7.89	1.67
6,701.1	60.00	359.97	6,511.2	-31.7	-474.3	-31.7	8.00	7.90	1.52
Start 150.0 hold at 6701.1 MD									
6,800.0	60.00	359.97	6,560.6	53.9	-474.4	53.9	0.00	0.00	0.00
6,851.1	60.00	359.97	6,586.2	98.2	-474.4	98.2	0.00	0.00	0.00
Start Build 10.00									
6,900.0	64.89	359.97	6,608.8	141.5	-474.4	141.5	10.00	10.00	0.00
6,950.0	69.89	359.97	6,628.0	187.6	-474.5	187.6	10.00	10.00	0.00
7,000.0	74.89	359.97	6,643.2	235.3	-474.5	235.3	10.00	10.00	0.00
7,050.0	79.89	359.97	6,654.1	284.0	-474.5	284.0	10.00	10.00	0.00
7,100.0	84.89	359.97	6,660.7	333.6	-474.5	333.6	10.00	10.00	0.00
7,151.1	90.00	359.97	6,663.0	384.6	-474.6	384.6	10.00	10.00	0.00
Start 4225.7 hold at 7151.1 MD									
7,200.0	90.00	359.97	6,663.0	433.5	-474.6	433.5	0.00	0.00	0.00
7,300.0	90.00	359.97	6,663.0	533.5	-474.6	533.5	0.00	0.00	0.00
7,400.0	90.00	359.97	6,663.0	633.5	-474.7	633.5	0.00	0.00	0.00

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDMProd

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,500.0	90.00	359.97	6,663.0	733.5	-474.7	733.5	0.00	0.00	0.00
7,600.0	90.00	359.97	6,663.0	833.5	-474.8	833.5	0.00	0.00	0.00
7,700.0	90.00	359.97	6,663.0	933.5	-474.8	933.5	0.00	0.00	0.00
7,800.0	90.00	359.97	6,663.0	1,033.5	-474.9	1,033.5	0.00	0.00	0.00
7,900.0	90.00	359.97	6,663.0	1,133.5	-474.9	1,133.5	0.00	0.00	0.00
8,000.0	90.00	359.97	6,663.0	1,233.5	-475.0	1,233.5	0.00	0.00	0.00
8,100.0	90.00	359.97	6,663.0	1,333.5	-475.0	1,333.5	0.00	0.00	0.00
8,200.0	90.00	359.97	6,663.0	1,433.5	-475.1	1,433.5	0.00	0.00	0.00
8,300.0	90.00	359.97	6,663.0	1,533.5	-475.1	1,533.5	0.00	0.00	0.00
8,400.0	90.00	359.97	6,663.0	1,633.5	-475.2	1,633.5	0.00	0.00	0.00
8,500.0	90.00	359.97	6,663.0	1,733.5	-475.2	1,733.5	0.00	0.00	0.00
8,600.0	90.00	359.97	6,663.0	1,833.5	-475.3	1,833.5	0.00	0.00	0.00
8,700.0	90.00	359.97	6,663.0	1,933.5	-475.4	1,933.5	0.00	0.00	0.00
8,800.0	90.00	359.97	6,663.0	2,033.5	-475.4	2,033.5	0.00	0.00	0.00
8,900.0	90.00	359.97	6,663.0	2,133.5	-475.5	2,133.5	0.00	0.00	0.00
9,000.0	90.00	359.97	6,663.0	2,233.5	-475.5	2,233.5	0.00	0.00	0.00
9,100.0	90.00	359.97	6,663.0	2,333.5	-475.6	2,333.5	0.00	0.00	0.00
9,200.0	90.00	359.97	6,663.0	2,433.5	-475.6	2,433.5	0.00	0.00	0.00
9,300.0	90.00	359.97	6,663.0	2,533.5	-475.7	2,533.5	0.00	0.00	0.00
9,400.0	90.00	359.97	6,663.0	2,633.5	-475.7	2,633.5	0.00	0.00	0.00
9,500.0	90.00	359.97	6,663.0	2,733.5	-475.8	2,733.5	0.00	0.00	0.00
9,600.0	90.00	359.97	6,663.0	2,833.5	-475.8	2,833.5	0.00	0.00	0.00
9,700.0	90.00	359.97	6,663.0	2,933.5	-475.9	2,933.5	0.00	0.00	0.00
9,800.0	90.00	359.97	6,663.0	3,033.5	-475.9	3,033.5	0.00	0.00	0.00
9,900.0	90.00	359.97	6,663.0	3,133.5	-476.0	3,133.5	0.00	0.00	0.00
10,000.0	90.00	359.97	6,663.0	3,233.5	-476.0	3,233.5	0.00	0.00	0.00
10,100.0	90.00	359.97	6,663.0	3,333.5	-476.1	3,333.5	0.00	0.00	0.00
10,200.0	90.00	359.97	6,663.0	3,433.5	-476.1	3,433.5	0.00	0.00	0.00
10,300.0	90.00	359.97	6,663.0	3,533.5	-476.2	3,533.5	0.00	0.00	0.00
10,400.0	90.00	359.97	6,663.0	3,633.5	-476.2	3,633.5	0.00	0.00	0.00
10,500.0	90.00	359.97	6,663.0	3,733.5	-476.3	3,733.5	0.00	0.00	0.00
10,600.0	90.00	359.97	6,663.0	3,833.5	-476.3	3,833.5	0.00	0.00	0.00
10,700.0	90.00	359.97	6,663.0	3,933.5	-476.4	3,933.5	0.00	0.00	0.00
10,800.0	90.00	359.97	6,663.0	4,033.5	-476.4	4,033.5	0.00	0.00	0.00
10,900.0	90.00	359.97	6,663.0	4,133.5	-476.5	4,133.5	0.00	0.00	0.00
11,000.0	90.00	359.97	6,663.0	4,233.5	-476.5	4,233.5	0.00	0.00	0.00
11,100.0	90.00	359.97	6,663.0	4,333.5	-476.6	4,333.5	0.00	0.00	0.00
11,200.0	90.00	359.97	6,663.0	4,433.5	-476.6	4,433.5	0.00	0.00	0.00
11,300.0	90.00	359.97	6,663.0	4,533.5	-476.7	4,533.5	0.00	0.00	0.00
11,376.8	90.00	359.97	6,663.0	4,610.3	-476.7	4,610.3	0.00	0.00	0.00
TD at 11376.8									

SandRidge Energy

Survey Report

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Site:	T7N-R80W-S18	MD Reference:	WELL @ 8222.0usft (Original Well Elev)
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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									
Coalmont 1-13H	0.00	360.00	6,663.0	4,610.3	-476.7	1,457,022.25	2,742,703.65	40° 35' 3.248 N	106° 25' 34.913 W
- plan hits target center									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
6,446.2	6,348.0	Niobrara		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
2800	2800	0	0	Start Build 2.00
3383	3379	-41	-43	Start 2463.2 hold at 3383.4 MD
5847	5792	-385	-403	Start DLS 8.00 TFO 137.62
6701	6511	-32	-474	Start 150.0 hold at 6701.1 MD
6851	6586	98	-474	Start Build 10.00
7151	6663	385	-475	Start 4225.7 hold at 7151.1 MD
11,377	6663	4610	-477	TD at 11376.8

Checked By: _____	Approved By: _____	Date: _____
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