



Archer Directional Drilling Services

Survey Report



Company:	Sandridge Energy, INC.(mid-con.)	Local Co-ordinate Reference:	Well Millershaski 2629 1-15H
Project:	Gray County (KA27N)	TVD Reference:	WELL @ 2761.0usft (Original Well Elev)
Site:	Sec. 15-T26S-R29W	MD Reference:	WELL @ 2761.0usft (Original Well Elev)
Well:	Millershaski 2629 1-15H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Gray County (KA27N)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Kansas South 1502		

Site	Sec. 15-T26S-R29W		
Site Position:		Northing:	411,929.72 usft
From:	Map	Easting:	1,426,075.79 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	37° 46' 52.324 N
		Longitude:	100° 29' 9.591 W
		Grid Convergence:	-1.22 °

Well	Millershaski 2629 1-15H		
Well Position	+N/-S	0.0 usft	Northing: 411,929.72 usft
	+E/-W	0.0 usft	Easting: 1,426,075.79 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	37° 46' 52.324 N
		Longitude:	100° 29' 9.591 W
		Ground Level:	2,741.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2012/06/11	6.13	65.51	52,043

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	1.33	

Survey Program	Date	2012/06/28			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
250.0	1,563.0	GYRO (Wellbore #1)	GYD_CT	Gyrodata continuous	
1,750.0	9,346.0	Archer MWD (Wellbore #1)	MWD	MWD - Standard	

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
250.0	0.40	83.70	250.0	0.1	0.9	0.1	0.16	0.16	0.00
499.0	1.00	83.70	499.0	0.4	3.9	0.5	0.24	0.24	0.00
749.0	1.00	83.70	748.9	0.9	8.2	1.1	0.00	0.00	0.00
1,031.0	0.30	83.70	1,030.9	1.3	11.4	1.5	0.25	-0.25	0.00
1,281.0	0.60	83.70	1,280.9	1.5	13.4	1.8	0.12	0.12	0.00
1,563.0	0.80	83.70	1,562.9	1.9	16.8	2.2	0.07	0.07	0.00
Last Gyro									
1,750.0	0.00	83.70	1,749.9	2.0	18.1	2.4	0.43	-0.43	0.00
2,228.0	0.30	47.90	2,227.9	2.8	19.0	3.3	0.06	0.06	0.00



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Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
2,706.0	0.30	34.90	2,705.9	4.7	20.7	5.2	0.01	0.00	-2.72	
3,184.0	0.50	323.00	3,183.9	7.4	20.1	7.9	0.10	0.04	-15.04	
3,662.0	0.30	278.10	3,661.9	9.2	17.6	9.6	0.07	-0.04	-9.39	
3,853.0	0.60	284.40	3,852.8	9.6	16.2	9.9	0.16	0.16	3.30	
3,948.0	0.60	261.60	3,947.8	9.6	15.2	10.0	0.25	0.00	-24.00	
4,012.0	0.60	291.10	4,011.8	9.7	14.5	10.0	0.48	0.00	46.09	
4,042.0	0.40	266.40	4,041.8	9.7	14.3	10.1	0.97	-0.67	-82.33	
4,074.0	0.60	348.00	4,073.8	9.9	14.1	10.2	2.10	0.63	255.00	
4,106.0	2.70	355.70	4,105.8	10.8	14.1	11.1	6.58	6.56	24.06	
4,138.0	4.40	4.50	4,137.8	12.8	14.1	13.1	5.56	5.31	27.50	
4,170.0	6.40	9.50	4,169.6	15.8	14.5	16.1	6.41	6.25	15.63	
4,201.0	8.40	8.00	4,200.4	19.7	15.1	20.0	6.48	6.45	-4.84	
4,233.0	10.70	3.10	4,231.9	25.0	15.6	25.3	7.62	7.19	-15.31	
4,265.0	11.80	4.80	4,263.3	31.2	16.0	31.6	3.59	3.44	5.31	
4,297.0	14.30	5.70	4,294.5	38.4	16.7	38.8	7.84	7.81	2.81	
4,329.0	16.80	5.60	4,325.3	46.9	17.5	47.3	7.81	7.81	-0.31	
4,361.0	19.60	3.80	4,355.7	56.9	18.3	57.3	8.92	8.75	-5.63	
4,393.0	22.20	1.50	4,385.6	68.3	18.8	68.7	8.52	8.13	-7.19	
4,425.0	24.80	1.10	4,414.9	81.1	19.1	81.5	8.14	8.13	-1.25	
4,456.0	27.20	1.80	4,442.8	94.6	19.5	95.1	7.80	7.74	2.26	
4,488.0	29.60	1.00	4,470.9	109.9	19.8	110.3	7.59	7.50	-2.50	
4,520.0	32.00	359.80	4,498.4	126.2	19.9	126.7	7.74	7.50	-3.75	
4,552.0	34.40	358.70	4,525.2	143.8	19.7	144.2	7.73	7.50	-3.44	
4,584.0	36.30	358.40	4,551.3	162.3	19.2	162.7	5.96	5.94	-0.94	
4,616.0	37.70	357.60	4,576.9	181.5	18.6	181.9	4.63	4.38	-2.50	
4,648.0	38.10	357.50	4,602.1	201.2	17.7	201.5	1.26	1.25	-0.31	
4,680.0	39.50	357.40	4,627.0	221.2	16.8	221.5	4.38	4.38	-0.31	
4,712.0	42.30	357.90	4,651.2	242.1	16.0	242.4	8.81	8.75	1.56	
4,743.0	45.60	357.90	4,673.5	263.6	15.2	263.9	10.65	10.65	0.00	
4,775.0	48.70	357.40	4,695.3	287.0	14.2	287.3	9.75	9.69	-1.56	
4,807.0	49.80	356.90	4,716.2	311.3	13.0	311.5	3.64	3.44	-1.56	
4,839.0	49.80	356.60	4,736.8	335.7	11.6	335.8	0.72	0.00	-0.94	
4,871.0	49.90	356.50	4,757.5	360.1	10.2	360.2	0.39	0.31	-0.31	
4,903.0	49.80	356.10	4,778.1	384.5	8.6	384.6	1.01	-0.31	-1.25	
4,935.0	49.40	355.50	4,798.8	408.8	6.8	408.8	1.90	-1.25	-1.88	
4,967.0	49.10	355.70	4,819.7	433.0	4.9	433.0	1.05	-0.94	0.63	
4,999.0	50.90	356.30	4,840.3	457.4	3.2	457.4	5.81	5.63	1.88	
5,031.0	54.30	357.50	4,859.7	482.8	1.9	482.7	11.03	10.63	3.75	
5,063.0	57.50	358.70	4,877.7	509.3	1.0	509.2	10.47	10.00	3.75	
5,095.0	60.20	360.00	4,894.2	536.7	0.7	536.5	9.13	8.44	4.06	
5,127.0	63.20	1.40	4,909.4	564.8	1.0	564.7	10.14	9.38	4.38	
5,159.0	66.50	2.30	4,923.0	593.8	2.0	593.7	10.62	10.31	2.81	
5,191.0	69.50	2.30	4,935.0	623.4	3.2	623.3	9.38	9.38	0.00	



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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)
5,223.0	71.90	2.00	4,945.6	653.6	4.3	653.5	7.55	7.50	-0.94
5,255.0	73.80	2.30	4,955.0	684.1	5.4	684.1	6.00	5.94	0.94
5,287.0	76.40	2.60	4,963.2	715.0	6.8	715.0	8.18	8.13	0.94
5,319.0	79.80	2.30	4,969.8	746.3	8.1	746.3	10.66	10.63	-0.94
5,351.0	82.30	1.50	4,974.8	777.9	9.1	777.9	8.19	7.81	-2.50
5,383.0	85.30	1.90	4,978.3	809.7	10.1	809.7	9.46	9.38	1.25
5,408.0	86.60	2.10	4,980.0	834.6	11.0	834.7	5.26	5.20	0.80
5,477.0	88.60	2.00	4,982.9	903.5	13.4	903.6	2.90	2.90	-0.14
5,508.0	90.20	2.20	4,983.2	934.5	14.6	934.6	5.20	5.16	0.65
5,539.0	91.40	2.30	4,982.8	965.5	15.8	965.6	3.88	3.87	0.32
5,570.0	91.80	2.50	4,981.9	996.4	17.1	996.6	1.44	1.29	0.65
5,602.0	91.80	2.60	4,980.9	1,028.4	18.5	1,028.5	0.31	0.00	0.31
5,633.0	91.80	2.10	4,980.0	1,059.3	19.8	1,059.5	1.61	0.00	-1.61
5,664.0	92.20	2.30	4,978.9	1,090.3	21.0	1,090.5	1.44	1.29	0.65
5,695.0	92.40	2.00	4,977.6	1,121.2	22.1	1,121.5	1.16	0.65	-0.97
5,727.0	92.80	2.10	4,976.2	1,153.2	23.3	1,153.4	1.29	1.25	0.31
5,758.0	92.00	1.70	4,974.9	1,184.1	24.3	1,184.4	2.88	-2.58	-1.29
5,789.0	91.60	2.10	4,973.9	1,215.1	25.3	1,215.4	1.82	-1.29	1.29
5,821.0	91.70	1.70	4,973.0	1,247.1	26.4	1,247.4	1.29	0.31	-1.25
5,852.0	92.20	1.70	4,971.9	1,278.1	27.3	1,278.3	1.61	1.61	0.00
5,883.0	92.50	1.60	4,970.7	1,309.0	28.2	1,309.3	1.02	0.97	-0.32
5,914.0	92.80	1.60	4,969.2	1,340.0	29.1	1,340.3	0.97	0.97	0.00
5,946.0	92.90	1.40	4,967.6	1,371.9	29.9	1,372.2	0.70	0.31	-0.63
5,977.0	92.00	1.40	4,966.3	1,402.9	30.6	1,403.2	2.90	-2.90	0.00
6,008.0	91.60	1.40	4,965.3	1,433.9	31.4	1,434.2	1.29	-1.29	0.00
6,040.0	91.90	1.10	4,964.4	1,465.8	32.1	1,466.2	1.33	0.94	-0.94
6,071.0	92.30	1.30	4,963.2	1,496.8	32.8	1,497.2	1.44	1.29	0.65
6,102.0	91.80	1.50	4,962.1	1,527.8	33.5	1,528.1	1.74	-1.61	0.65
6,133.0	91.30	1.80	4,961.3	1,558.8	34.4	1,559.1	1.88	-1.61	0.97
6,165.0	91.70	1.80	4,960.4	1,590.7	35.4	1,591.1	1.25	1.25	0.00
6,196.0	90.80	2.00	4,959.8	1,621.7	36.4	1,622.1	2.97	-2.90	0.65
6,227.0	89.80	1.80	4,959.6	1,652.7	37.5	1,653.1	3.29	-3.23	-0.65
6,259.0	90.20	2.00	4,959.6	1,684.7	38.5	1,685.1	1.40	1.25	0.63
6,290.0	90.40	1.80	4,959.4	1,715.6	39.6	1,716.1	0.91	0.65	-0.65
6,321.0	90.70	1.90	4,959.1	1,746.6	40.6	1,747.1	1.02	0.97	0.32
6,353.0	90.60	1.70	4,958.8	1,778.6	41.6	1,779.1	0.70	-0.31	-0.63
6,384.0	90.90	1.80	4,958.4	1,809.6	42.5	1,810.1	1.02	0.97	0.32
6,415.0	91.10	2.10	4,957.8	1,840.6	43.6	1,841.1	1.16	0.65	0.97
6,446.0	91.40	2.30	4,957.2	1,871.5	44.7	1,872.1	1.16	0.97	0.65
6,478.0	92.00	2.40	4,956.2	1,903.5	46.1	1,904.1	1.90	1.88	0.31
6,509.0	91.20	2.50	4,955.3	1,934.5	47.4	1,935.0	2.60	-2.58	0.32
6,540.0	89.80	1.90	4,955.1	1,965.4	48.6	1,966.0	4.91	-4.52	-1.94
6,572.0	89.50	2.10	4,955.3	1,997.4	49.7	1,998.0	1.13	-0.94	0.63



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6,603.0	89.80	2.20	4,955.5	2,028.4	50.9	2,029.0	1.02	0.97	0.32
6,634.0	89.80	2.20	4,955.6	2,059.4	52.0	2,060.0	0.00	0.00	0.00
6,665.0	90.20	2.20	4,955.6	2,090.3	53.2	2,091.0	1.29	1.29	0.00
6,697.0	90.30	2.00	4,955.4	2,122.3	54.4	2,123.0	0.70	0.31	-0.63
6,728.0	90.50	2.00	4,955.2	2,153.3	55.5	2,154.0	0.65	0.65	0.00
6,760.0	90.80	2.10	4,954.8	2,185.3	56.6	2,186.0	0.99	0.94	0.31
6,791.0	91.00	2.00	4,954.4	2,216.3	57.7	2,217.0	0.72	0.65	-0.32
6,824.0	91.20	2.00	4,953.7	2,249.2	58.9	2,250.0	0.61	0.61	0.00
6,855.0	91.40	2.10	4,953.0	2,280.2	60.0	2,281.0	0.72	0.65	0.32
6,887.0	91.60	2.10	4,952.2	2,312.2	61.2	2,313.0	0.63	0.63	0.00
6,919.0	91.50	1.70	4,951.3	2,344.1	62.2	2,345.0	1.29	-0.31	-1.25
6,951.0	91.40	1.80	4,950.5	2,376.1	63.2	2,376.9	0.44	-0.31	0.31
6,983.0	91.50	1.50	4,949.7	2,408.1	64.1	2,408.9	0.99	0.31	-0.94
7,015.0	90.90	1.60	4,949.0	2,440.1	65.0	2,440.9	1.90	-1.88	0.31
7,047.0	90.00	2.30	4,948.8	2,472.1	66.1	2,472.9	3.56	-2.81	2.19
7,079.0	90.40	2.30	4,948.7	2,504.0	67.4	2,504.9	1.25	1.25	0.00
7,111.0	90.30	1.90	4,948.5	2,536.0	68.5	2,536.9	1.29	-0.31	-1.25
7,143.0	89.40	1.50	4,948.5	2,568.0	69.5	2,568.9	3.08	-2.81	-1.25
7,175.0	88.70	1.50	4,949.1	2,600.0	70.3	2,600.9	2.19	-2.19	0.00
7,207.0	88.80	1.10	4,949.8	2,632.0	71.1	2,632.9	1.29	0.31	-1.25
7,239.0	89.10	1.40	4,950.4	2,663.9	71.8	2,664.9	1.33	0.94	0.94
7,271.0	89.20	1.10	4,950.8	2,695.9	72.5	2,696.9	0.99	0.31	-0.94
7,302.0	89.30	1.30	4,951.2	2,726.9	73.1	2,727.9	0.72	0.32	0.65
7,334.0	89.50	1.20	4,951.6	2,758.9	73.8	2,759.9	0.70	0.63	-0.31
7,366.0	89.80	1.30	4,951.8	2,790.9	74.5	2,791.9	0.99	0.94	0.31
7,398.0	90.30	1.50	4,951.7	2,822.9	75.3	2,823.9	1.68	1.56	0.63
7,430.0	90.40	1.30	4,951.6	2,854.9	76.1	2,855.9	0.70	0.31	-0.63
7,462.0	89.50	1.30	4,951.6	2,886.9	76.8	2,887.9	2.81	-2.81	0.00
7,494.0	89.30	0.90	4,951.9	2,918.9	77.4	2,919.9	1.40	-0.63	-1.25
7,526.0	89.70	1.10	4,952.2	2,950.9	78.0	2,951.9	1.40	1.25	0.63
7,558.0	89.90	1.20	4,952.3	2,982.9	78.6	2,983.9	0.70	0.63	0.31
7,589.0	90.20	0.90	4,952.3	3,013.9	79.2	3,014.9	1.37	0.97	-0.97
7,621.0	90.50	0.80	4,952.1	3,045.9	79.6	3,046.9	0.99	0.94	-0.31
7,653.0	89.50	0.80	4,952.1	3,077.8	80.1	3,078.9	3.13	-3.13	0.00
7,685.0	89.20	0.50	4,952.4	3,109.8	80.5	3,110.9	1.33	-0.94	-0.94
7,717.0	89.50	0.60	4,952.8	3,141.8	80.8	3,142.9	0.99	0.94	0.31
7,749.0	90.10	0.80	4,952.9	3,173.8	81.2	3,174.9	1.98	1.88	0.63
7,781.0	90.30	0.80	4,952.8	3,205.8	81.6	3,206.9	0.63	0.63	0.00
7,812.0	88.80	0.60	4,953.1	3,236.8	82.0	3,237.9	4.88	-4.84	-0.65
7,844.0	87.90	0.50	4,954.0	3,268.8	82.3	3,269.8	2.83	-2.81	-0.31
7,876.0	88.30	0.80	4,955.0	3,300.8	82.6	3,301.8	1.56	1.25	0.94
7,908.0	88.30	0.50	4,956.0	3,332.8	83.0	3,333.8	0.94	0.00	-0.94
7,940.0	88.60	0.60	4,956.9	3,364.8	83.3	3,365.8	0.99	0.94	0.31
7,972.0	88.80	0.40	4,957.6	3,396.8	83.6	3,397.8	0.88	0.63	-0.63



Archer Directional Drilling Services

Survey Report



Company:	Sandridge Energy, INC.(mid-con.)	Local Co-ordinate Reference:	Well Millershaski 2629 1-15H
Project:	Gray County (KA27N)	TVD Reference:	WELL @ 2761.0usft (Original Well Elev)
Site:	Sec. 15-T26S-R29W	MD Reference:	WELL @ 2761.0usft (Original Well Elev)
Well:	Millershaski 2629 1-15H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
8,004.0	89.20	0.50	4,958.1	3,428.8	83.8	3,429.8	1.29	1.25	0.31
8,036.0	89.60	0.90	4,958.5	3,460.7	84.2	3,461.8	1.77	1.25	1.25
8,068.0	90.20	0.40	4,958.5	3,492.7	84.6	3,493.8	2.44	1.88	-1.56
8,100.0	89.30	1.20	4,958.7	3,524.7	85.0	3,525.8	3.76	-2.81	2.50
8,132.0	89.50	2.00	4,959.0	3,556.7	85.9	3,557.8	2.58	0.63	2.50
8,164.0	89.50	1.90	4,959.3	3,588.7	87.0	3,589.8	0.31	0.00	-0.31
8,196.0	89.60	2.10	4,959.5	3,620.7	88.1	3,621.8	0.70	0.31	0.63
8,228.0	90.10	2.10	4,959.6	3,652.7	89.3	3,653.8	1.56	1.56	0.00
8,259.0	90.90	2.40	4,959.3	3,683.6	90.5	3,684.7	2.76	2.58	0.97
8,291.0	89.80	2.30	4,959.1	3,715.6	91.8	3,716.7	3.45	-3.44	-0.31
8,323.0	89.40	2.50	4,959.4	3,747.6	93.2	3,748.7	1.40	-1.25	0.63
8,355.0	88.90	2.60	4,959.8	3,779.5	94.6	3,780.7	1.59	-1.56	0.31
8,387.0	89.10	2.80	4,960.4	3,811.5	96.1	3,812.7	0.88	0.63	0.63
8,419.0	89.40	2.50	4,960.8	3,843.5	97.6	3,844.7	1.33	0.94	-0.94
8,451.0	89.90	2.70	4,961.0	3,875.4	99.1	3,876.7	1.68	1.56	0.63
8,482.0	90.50	2.50	4,960.9	3,906.4	100.5	3,907.7	2.04	1.94	-0.65
8,514.0	89.70	2.20	4,960.9	3,938.4	101.8	3,939.7	2.67	-2.50	-0.94
8,546.0	89.20	2.00	4,961.2	3,970.4	102.9	3,971.7	1.68	-1.56	-0.63
8,578.0	89.30	2.10	4,961.6	4,002.3	104.1	4,003.7	0.44	0.31	0.31
8,610.0	89.40	2.10	4,961.9	4,034.3	105.3	4,035.7	0.31	0.31	0.00
8,642.0	89.10	1.90	4,962.4	4,066.3	106.4	4,067.7	1.13	-0.94	-0.63
8,674.0	89.10	1.90	4,962.9	4,098.3	107.4	4,099.7	0.00	0.00	0.00
8,706.0	89.20	1.70	4,963.3	4,130.2	108.4	4,131.6	0.70	0.31	-0.63
8,738.0	89.70	2.10	4,963.6	4,162.2	109.5	4,163.6	2.00	1.56	1.25
8,770.0	89.70	2.10	4,963.8	4,194.2	110.7	4,195.6	0.00	0.00	0.00
8,801.0	89.80	1.90	4,964.0	4,225.2	111.8	4,226.6	0.72	0.32	-0.65
8,833.0	90.20	2.00	4,964.0	4,257.2	112.8	4,258.6	1.29	1.25	0.31
8,865.0	90.20	1.90	4,963.8	4,289.1	113.9	4,290.6	0.31	0.00	-0.31
8,897.0	90.10	1.90	4,963.8	4,321.1	115.0	4,322.6	0.31	-0.31	0.00
8,929.0	90.20	1.70	4,963.7	4,353.1	116.0	4,354.6	0.70	0.31	-0.63
8,961.0	90.30	1.60	4,963.5	4,385.1	116.9	4,386.6	0.44	0.31	-0.31
8,993.0	90.70	1.50	4,963.3	4,417.1	117.8	4,418.6	1.29	1.25	-0.31
9,025.0	91.20	1.50	4,962.7	4,449.1	118.6	4,450.6	1.56	1.56	0.00
9,057.0	91.80	1.40	4,961.9	4,481.0	119.4	4,482.6	1.90	1.88	-0.31
9,089.0	92.30	1.40	4,960.7	4,513.0	120.2	4,514.6	1.56	1.56	0.00
9,121.0	91.50	1.10	4,959.7	4,545.0	120.9	4,546.6	2.67	-2.50	-0.94
9,153.0	90.10	1.40	4,959.2	4,577.0	121.6	4,578.6	4.47	-4.38	0.94
9,185.0	89.30	1.40	4,959.4	4,609.0	122.4	4,610.6	2.50	-2.50	0.00
9,216.0	89.10	1.30	4,959.8	4,640.0	123.1	4,641.6	0.72	-0.65	-0.32
9,248.0	89.10	1.20	4,960.3	4,671.9	123.8	4,673.6	0.31	0.00	-0.31
9,280.0	89.20	1.30	4,960.8	4,703.9	124.5	4,705.6	0.44	0.31	0.31
9,288.0	89.30	1.20	4,960.9	4,711.9	124.7	4,713.6	1.77	1.25	-1.25

Last Archer Survey



Archer Directional Drilling Services

Survey Report



Company:	Sandridge Energy, INC.(mid-con.)	Local Co-ordinate Reference:	Well Millershaski 2629 1-15H
Project:	Gray County (KA27N)	TVD Reference:	WELL @ 2761.0usft (Original Well Elev)
Site:	Sec. 15-T26S-R29W	MD Reference:	WELL @ 2761.0usft (Original Well Elev)
Well:	Millershaski 2629 1-15H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
9,346.0	89.30	1.20	4,961.6	4,769.9	125.9	4,771.6	0.00	0.00	0.00
Projection to TD									

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,563.0	1,562.9	1.9	16.8	Last Gyro
9,288.0	4,960.9	4,711.9	124.7	Last Archer Survey
9,346.0	4,961.6	4,769.9	125.9	Projection to TD

Checked By: _____ Approved By: _____ Date: _____