



Actual Wellpath Report

Sandridge Sarah 1-34H_Final Surveys.

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Sarah 1-34H SL 200FNL, 810FWL
Area	Kansas	Well	Subject
Field	Comanche County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Sarah 1-34H AWB
Facility	Sarah 1-34H Sec.34-33S-17W		

REPORT SETUP INFORMATION			
Projection System	NAD27 / Lambert Kansas SP, Southern Zone (1502), US feet		
North Reference	Grid	Software System	WellArchitect 3.0.0
Convergence at slot	0.41° West	User	Dehamard
Scale	1.00003	Report Generated	3/26/2012 at 3:59:32 PM
Wellbore last revised	02-29-2012	Database/Source file	Oklahoma City

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	1807376.00	171569.00	37°08'09.534"N	99°09'38.690"W
Facility Reference Pt			1807376.00	171569.00	37°08'09.534"N	99°09'38.690"W
Field Reference Pt			1773194.47	191302.75	37°11'22.030"N	99°16'42.810"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Lariat 3 (RKB) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Slot	Lariat 3 (RKB) to Mean Sea Level	1849.00ft
Vertical Reference Pt	Lariat 3 (RKB)	Lariat 3 (RKB) to Mud Line at Slot (Sarah 1-34H SL 200FNL, 810FWL)	18.00ft
MD Reference Pt	Lariat 3 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	178.14°

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WELLPATH DATA (108 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Log Comment
0.00	0.000	0.000	0.00	0.00	0.00	0.00	1807376.00	171569.00	0.00	
18.00	0.000	0.000	18.00	0.00	0.00	0.00	1807376.00	171569.00	0.00	
279.00	0.680	0.000	278.99	-1.55	1.55	0.00	1807376.00	171570.55	0.26	
502.00	0.200	0.000	501.99	-3.26	3.26	0.00	1807376.00	171572.26	0.22	
907.00	0.390	51.250	906.98	-4.79	4.83	1.07	1807377.07	171573.83	0.08	
1189.00	0.230	46.210	1188.98	-5.75	5.82	2.23	1807378.23	171574.82	0.06	
1470.00	0.350	81.590	1469.97	-6.22	6.34	3.49	1807379.49	171575.34	0.07	
1755.00	0.470	96.170	1754.97	-6.16	6.34	5.51	1807381.51	171575.34	0.06	
2037.00	0.280	88.350	2036.96	-5.99	6.24	7.35	1807383.35	171575.24	0.07	
2321.00	0.820	146.290	2320.95	-4.27	4.57	9.17	1807385.17	171573.57	0.25	
2609.00	1.070	162.350	2608.91	0.07	0.29	11.13	1807387.13	171569.29	0.13	
2896.00	0.900	153.560	2895.87	4.70	-4.28	12.95	1807388.95	171564.72	0.08	
3183.00	0.800	152.920	3182.84	8.56	-8.08	14.86	1807390.86	171560.91	0.03	
3469.00	0.990	162.140	3468.80	12.74	-12.21	16.53	1807392.53	171556.79	0.08	
3757.00	1.050	181.430	3756.76	17.77	-17.22	17.23	1807393.23	171551.78	0.12	
4042.00	1.090	192.530	4041.71	23.00	-22.48	16.57	1807392.57	171546.52	0.07	
4190.00	1.170	195.340	4189.68	25.81	-25.31	15.87	1807391.87	171543.69	0.07	
4235.00	1.550	178.570	4234.66	26.86	-26.36	15.76	1807391.76	171542.64	1.21	
4266.00	2.920	174.010	4265.64	28.06	-27.56	15.85	1807391.85	171541.43	4.45	
4298.00	4.800	180.020	4297.57	30.22	-29.71	15.94	1807391.94	171539.29	6.00	
4330.00	6.450	186.280	4329.41	33.33	-32.84	15.74	1807391.74	171536.16	5.49	
4362.00	8.220	192.100	4361.15	37.33	-36.86	15.07	1807391.07	171532.14	5.99	
4394.00	8.990	193.090	4392.79	41.97	-41.54	14.02	1807390.02	171527.46	2.45	
4426.00	11.660	189.800	4424.27	47.55	-47.16	12.90	1807388.90	171521.84	8.54	
4458.00	14.220	188.600	4455.45	54.59	-54.23	11.76	1807387.77	171514.77	8.04	
4490.00	17.520	187.830	4486.23	63.20	-62.89	10.52	1807386.52	171506.11	10.33	
4521.00	20.860	187.240	4515.50	73.25	-72.99	9.19	1807385.19	171496.00	10.79	
4553.00	24.230	186.290	4545.05	85.38	-85.18	7.75	1807383.75	171483.82	10.59	
4585.00	27.460	185.120	4573.85	99.21	-99.05	6.37	1807382.37	171469.94	10.22	
4617.00	30.010	183.580	4601.91	114.50	-114.39	5.21	1807381.21	171454.60	8.30	
4648.00	32.112	182.512	4628.46	130.44	-130.36	4.37	1807380.37	171438.63	7.01	Hardline Crossing 4648MD(4628TVD) 330 FNL, 811 FWL
4649.00	32.180	182.480	4629.31	130.97	-130.90	4.35	1807380.35	171438.10	7.01	
4681.00	34.430	182.060	4656.05	148.49	-148.45	3.65	1807379.65	171420.54	7.07	
4713.00	35.790	181.990	4682.23	166.85	-166.84	3.00	1807379.00	171402.15	4.25	
4744.00	37.120	181.210	4707.16	185.24	-185.26	2.49	1807378.49	171383.74	4.54	
4776.00	38.740	181.130	4732.40	204.88	-204.92	2.09	1807378.09	171364.07	5.06	
4808.00	40.650	180.330	4757.02	225.30	-225.36	1.83	1807377.83	171343.64	6.18	
4840.00	41.820	179.270	4781.08	246.38	-246.45	1.91	1807377.91	171322.54	4.26	
4872.00	42.450	178.130	4804.81	267.85	-267.91	2.39	1807378.40	171301.08	3.10	
4904.00	42.780	177.390	4828.36	289.51	-289.56	3.24	1807379.24	171279.43	1.87	
4935.00	44.150	176.550	4850.86	310.83	-310.85	4.37	1807380.37	171258.14	4.80	
4968.00	45.680	177.160	4874.23	334.13	-334.12	5.65	1807381.65	171234.87	4.82	
4999.00	47.550	177.500	4895.53	356.65	-356.62	6.70	1807382.70	171212.37	6.08	
5039.00	48.910	177.770	4922.17	386.48	-386.43	7.93	1807383.93	171182.56	3.44	
5095.00	49.410	177.000	4958.79	428.84	-428.75	9.86	1807385.86	171140.24	1.37	

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WELLPATH DATA (108 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Log Comment
5158.00	49.730	176.730	4999.65	476.79	-476.63	12.48	1807388.48	171092.35	0.60	
5190.00	49.300	176.350	5020.42	501.12	-500.93	13.95	1807389.95	171068.06	1.62	
5222.00	49.370	176.050	5041.28	525.38	-525.15	15.56	1807391.56	171043.84	0.74	
5254.00	51.330	175.110	5061.69	549.99	-549.71	17.46	1807393.46	171019.27	6.53	
5286.00	54.830	176.350	5080.91	575.54	-575.22	19.36	1807395.36	170993.77	11.37	
5318.00	58.350	176.400	5098.53	602.24	-601.87	21.05	1807397.05	170967.11	11.00	
5350.00	62.010	176.340	5114.44	629.98	-629.58	22.81	1807398.81	170939.41	11.44	
5381.00	64.960	176.210	5128.28	657.71	-657.25	24.61	1807400.61	170911.73	9.52	
5413.00	68.500	176.620	5140.92	687.08	-686.59	26.45	1807402.45	170882.39	11.12	
5445.00	72.240	176.440	5151.67	717.21	-716.67	28.27	1807404.27	170852.31	11.70	
5477.00	76.280	176.000	5160.35	747.98	-747.39	30.30	1807406.30	170821.59	12.69	
5509.00	80.060	175.740	5166.91	779.27	-778.63	32.56	1807408.56	170790.35	11.84	
5541.00	82.880	177.330	5171.65	810.90	-810.21	34.47	1807410.47	170758.77	10.09	
5555.00	83.610	176.520	5173.30	824.80	-824.09	35.21	1807411.21	170744.88	7.76	
5627.00	87.440	177.760	5178.92	896.56	-895.77	38.79	1807414.79	170673.21	5.59	
5658.00	87.380	178.770	5180.32	927.53	-926.72	39.73	1807415.73	170642.25	3.26	
5690.00	89.510	180.040	5181.19	959.50	-958.71	40.06	1807416.06	170610.27	7.75	
5721.00	90.660	178.080	5181.14	990.50	-989.70	40.57	1807416.57	170579.27	7.33	
5784.00	89.260	179.810	5181.18	1053.49	-1052.69	41.73	1807417.73	170516.28	3.53	
5877.00	91.020	180.660	5180.96	1146.42	-1145.68	41.35	1807417.35	170423.29	2.10	
5971.00	91.860	180.820	5178.59	1240.29	-1239.64	40.14	1807416.14	170329.32	0.91	
6065.00	92.630	181.560	5174.91	1334.09	-1333.55	38.18	1807414.19	170235.42	1.14	
6159.00	90.000	179.660	5172.75	1427.96	-1427.51	37.19	1807413.19	170141.46	3.45	
6253.00	89.910	178.470	5172.83	1521.95	-1521.49	38.72	1807414.72	170047.47	1.27	
6347.00	91.100	178.600	5172.00	1615.94	-1615.46	41.12	1807417.12	169953.50	1.27	
6441.00	91.530	179.530	5169.84	1709.90	-1709.42	42.66	1807418.66	169859.54	1.09	
6534.00	91.570	179.420	5167.33	1802.84	-1802.38	43.51	1807419.51	169766.57	0.13	
6628.00	90.590	178.840	5165.56	1896.81	-1896.35	44.93	1807420.94	169672.60	1.21	
6722.00	90.000	178.830	5165.07	1990.80	-1990.33	46.85	1807422.85	169578.62	0.63	
6816.00	90.770	179.550	5164.44	2084.78	-2084.32	48.17	1807424.18	169484.63	1.12	
6910.00	91.790	179.010	5162.34	2178.74	-2178.28	49.36	1807425.36	169390.66	1.23	
7004.00	91.170	176.160	5159.91	2272.69	-2272.16	53.32	1807429.32	169296.78	3.10	
7099.00	91.540	176.160	5157.67	2367.61	-2366.92	59.68	1807435.68	169202.02	0.39	
7195.00	89.820	175.700	5156.53	2463.53	-2462.67	66.49	1807442.49	169106.27	1.85	
7292.00	89.350	175.250	5157.23	2560.42	-2559.36	74.14	1807450.14	169009.57	0.67	
7387.00	87.380	175.380	5159.94	2655.26	-2654.00	81.90	1807457.90	168914.93	2.08	
7482.00	88.460	175.110	5163.39	2750.08	-2748.61	89.77	1807465.77	168820.32	1.17	
7578.00	89.170	175.870	5165.37	2845.95	-2844.29	97.31	1807473.32	168724.63	1.08	
7674.00	89.180	178.280	5166.75	2941.92	-2940.15	102.21	1807478.21	168628.77	2.51	
7770.00	91.940	176.260	5165.82	3037.89	-3036.02	106.78	1807482.79	168532.90	3.56	
7865.00	92.280	176.420	5162.32	3132.78	-3130.76	112.84	1807488.85	168438.15	0.40	
7961.00	91.330	177.580	5159.30	3228.71	-3226.58	117.86	1807493.87	168342.33	1.56	
8057.00	90.740	178.240	5157.56	3324.69	-3322.50	121.36	1807497.37	168246.41	0.92	
8153.00	90.430	177.610	5156.58	3420.68	-3418.43	124.84	1807500.84	168150.48	0.73	
8249.00	89.660	177.210	5156.51	3516.67	-3514.33	129.18	1807505.18	168054.57	0.90	

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Area	Kansas	Well	Subject
Field	Comanche County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Sarah 1-34H AWB
Facility	Sarah 1-34H Sec.34-33S-17W		

WELLPATH DATA (108 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Log Comment
8344.00	88.360	177.710	5158.15	3611.65	-3609.22	133.39	1807509.39	167959.68	1.47	
8440.00	89.600	179.150	5159.86	3707.63	-3705.17	136.02	1807512.02	167863.73	1.98	
8536.00	89.970	178.870	5160.22	3803.62	-3801.15	137.68	1807513.68	167767.75	0.48	
8631.00	90.310	178.840	5159.98	3898.61	-3896.13	139.57	1807515.58	167672.76	0.36	
8727.00	89.010	178.220	5160.55	3994.60	-3992.10	142.04	1807518.04	167576.80	1.50	
8823.00	90.190	183.840	5161.22	4090.44	-4088.04	140.31	1807516.32	167480.85	5.98	
8918.00	88.860	178.730	5162.01	4185.26	-4182.98	138.18	1807514.19	167385.91	5.56	
9014.00	90.560	179.380	5162.50	4281.24	-4278.96	139.76	1807515.77	167289.93	1.90	
9110.00	92.000	179.850	5160.35	4377.18	-4374.93	140.41	1807516.41	167193.95	1.58	
9206.00	93.020	179.810	5156.15	4473.05	-4470.84	140.69	1807516.70	167098.05	1.06	
9301.00	91.160	176.940	5152.68	4567.97	-4565.72	143.39	1807519.39	167003.16	3.60	
9397.00	91.230	178.400	5150.68	4663.94	-4661.62	147.29	1807523.29	166907.26	1.52	
9493.00	91.230	177.960	5148.62	4759.92	-4757.55	150.34	1807526.34	166811.33	0.46	
9589.00	91.010	178.030	5146.75	4855.90	-4853.47	153.70	1807529.70	166715.40	0.24	
9685.00	90.650	176.920	5145.35	4951.88	-4949.37	157.92	1807533.93	166619.50	1.22	
9707.00	90.680	176.960	5145.10	4973.88	-4971.33	159.10	1807535.10	166597.54	0.23	
9750.00	90.680	176.960	5144.59	5016.87	-5014.27	161.38	1807537.38	166554.60	0.00	Hardline Crossing 9750MD(5144TVD) 330 FSL, 809 FWL
9752.00	90.680	176.960	5144.57	5018.87	-5016.27	161.49	1807537.49	166552.60	0.00	Actual BHL 9752MD(5144TVD) 329 FSL, 809 FWL

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Sarah 1-34H PBHL		5145.97	-5014.91	162.72	1807538.73	166553.96	37°07'19.962"N	99°09'36.242"W	point

WELLPATH COMPOSITION - Ref Wellbore: Sarah 1-34H AWB Ref Wellpath: AWP - Final										
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment			Wellbore		
18.00	9707.00	NaviTrak (Standard)			Inteq MWD			Sarah 1-34H AWB		
9707.00	9752.00	Blind Drilling (std)			Projection to bit			Sarah 1-34H AWB		