

Actual Wellpath Report

Sandridge Brad 3508 2-12H (Unit 310)_Final Surveys.

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Brad 3508 2-12H (Unit 310)
Area	Kansas	Well	SL (2440 FNL, 660 FWL)
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Brad 3508 2-12H (Unit 310) Actual
Facility	Brad 3508 2-12H Sec 12-35S-8W		

WELLPATH DATA (121 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	315.120	0.00	0.00	0.00	0.00	2104025.00	127051.00	0.00	
15.00	0.000	315.120	15.00	0.00	0.00	0.00	2104025.00	127051.00	0.00	
250.00	0.250	315.120	250.00	0.37	0.36	-0.36	2104024.64	127051.36	0.11	
500.00	1.000	315.120	499.98	2.31	2.30	-2.29	2104022.71	127053.30	0.30	
735.00	1.250	315.120	734.94	5.60	5.56	-5.54	2104019.46	127056.57	0.11	
818.00	0.090	315.120	817.93	6.29	6.25	-6.23	2104018.77	127057.25	1.40	
909.00	0.030	75.960	908.93	6.34	6.31	-6.25	2104018.75	127057.31	0.12	
1001.00	0.040	110.810	1000.93	6.34	6.30	-6.20	2104018.80	127057.30	0.03	
1094.00	0.030	249.770	1093.93	6.32	6.28	-6.19	2104018.81	127057.28	0.07	
1186.00	0.040	202.610	1185.93	6.28	6.25	-6.23	2104018.77	127057.25	0.03	
1278.00	0.130	181.860	1277.93	6.15	6.11	-6.24	2104018.76	127057.11	0.10	
1370.00	0.150	156.760	1369.93	5.93	5.90	-6.20	2104018.80	127056.90	0.07	
1559.00	0.150	145.750	1558.93	5.50	5.46	-5.96	2104019.04	127056.47	0.02	
1837.00	0.090	319.160	1836.93	5.36	5.33	-5.90	2104019.10	127056.33	0.09	
2027.00	0.070	280.390	2026.93	5.50	5.46	-6.11	2104018.89	127056.46	0.03	
2122.00	0.070	291.830	2121.93	5.53	5.50	-6.22	2104018.78	127056.50	0.01	
2217.00	0.120	228.860	2216.93	5.49	5.45	-6.35	2104018.65	127056.45	0.11	
2312.00	0.110	202.150	2311.93	5.34	5.30	-6.46	2104018.54	127056.30	0.06	
2407.00	0.070	151.300	2406.93	5.20	5.17	-6.47	2104018.53	127056.17	0.09	
2502.00	0.170	109.220	2501.93	5.10	5.07	-6.31	2104018.69	127056.07	0.13	
2597.00	0.150	100.810	2596.93	5.03	5.00	-6.05	2104018.95	127056.00	0.03	
2692.00	0.790	221.780	2691.92	4.52	4.49	-6.37	2104018.63	127055.49	0.92	
2787.00	0.840	132.700	2786.92	3.56	3.53	-6.29	2104018.71	127054.53	1.20	
2882.00	0.060	357.010	2881.91	3.14	3.10	-5.78	2104019.22	127054.10	0.93	
2977.00	0.510	296.310	2976.91	3.38	3.34	-6.16	2104018.84	127054.34	0.51	
3071.00	0.340	179.180	3070.91	3.28	3.25	-6.53	2104018.47	127054.25	0.78	
3166.00	0.150	359.820	3165.91	3.13	3.09	-6.53	2104018.47	127054.09	0.52	
3261.00	0.100	78.900	3260.91	3.27	3.23	-6.45	2104018.55	127054.23	0.17	
3356.00	0.190	132.520	3355.91	3.18	3.14	-6.25	2104018.75	127054.14	0.16	
3450.00	0.090	124.540	3449.91	3.03	2.99	-6.08	2104018.92	127053.99	0.11	
3545.00	0.130	172.170	3544.91	2.88	2.84	-6.00	2104019.00	127053.84	0.10	
3640.00	0.060	0.590	3639.91	2.82	2.79	-5.98	2104019.01	127053.79	0.20	
3735.00	0.400	126.740	3734.91	2.67	2.64	-5.72	2104019.28	127053.64	0.46	
3830.00	0.140	205.190	3829.91	2.37	2.33	-5.50	2104019.50	127053.33	0.42	
3925.00	0.740	355.350	3924.91	2.87	2.84	-5.60	2104019.40	127053.84	0.91	
3956.00	3.020	6.190	3955.89	3.88	3.85	-5.53	2104019.47	127054.85	7.41	
3988.00	4.810	5.770	3987.81	6.06	6.03	-5.30	2104019.70	127057.03	5.59	
4019.00	6.380	9.460	4018.66	9.05	9.02	-4.89	2104020.11	127060.02	5.19	
4051.00	7.860	11.970	4050.42	12.94	12.91	-4.14	2104020.86	127063.91	4.72	
4083.00	8.830	12.970	4082.08	17.46	17.45	-3.14	2104021.86	127068.45	3.06	
4114.00	10.630	15.790	4112.63	22.53	22.52	-1.83	2104023.17	127073.52	6.00	
4146.00	11.730	16.320	4144.02	28.48	28.48	-0.11	2104024.89	127079.48	3.45	
4178.00	12.770	15.840	4175.29	34.99	35.00	1.77	2104026.77	127086.00	3.27	
4209.00	14.050	13.850	4205.45	41.93	41.95	3.61	2104028.61	127092.96	4.39	
4241.00	15.560	15.900	4236.38	49.82	49.85	5.71	2104030.71	127100.86	4.99	

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Area	Kansas	Well	SL (2440 FNL, 660 FWL)
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Brad 3508 2-12H (Unit 310) Actual
Facility	Brad 3508 2-12H Sec 12-35S-8W		

WELLPATH DATA (121 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
4272.00	16.900	16.060	4266.15	58.13	58.18	8.10	2104033.10	127109.18	4.32	
4303.00	19.710	14.410	4295.58	67.52	67.58	10.65	2104035.65	127118.58	9.22	
4335.00	22.850	12.820	4325.39	78.79	78.86	13.37	2104038.37	127129.87	9.98	
4367.00	25.680	11.460	4354.56	91.63	91.72	16.12	2104041.13	127142.73	9.01	
4398.00	28.670	10.820	4382.14	105.50	105.61	18.86	2104043.86	127156.62	9.69	
4430.00	30.990	8.730	4409.90	121.17	121.30	21.55	2104046.55	127172.30	7.94	
4461.00	33.470	6.290	4436.12	137.55	137.68	23.70	2104048.70	127188.69	9.03	
4493.00	36.660	5.280	4462.31	155.82	155.97	25.54	2104050.54	127206.98	10.13	
4525.00	40.260	4.200	4487.36	175.65	175.80	27.18	2104052.18	127226.81	11.44	
4556.00	42.780	2.740	4510.57	196.15	196.31	28.42	2104053.42	127247.32	8.71	
4588.00	44.330	0.410	4533.76	218.18	218.35	29.02	2104054.02	127269.36	6.97	
4620.00	46.680	359.210	4556.19	241.01	241.17	28.94	2104053.94	127292.19	7.82	
4651.00	49.720	359.180	4576.85	264.11	264.28	28.61	2104053.61	127315.29	9.81	
4694.00	51.000	359.240	4604.28	297.22	297.39	28.15	2104053.16	127348.41	2.98	
4746.00	50.790	358.750	4637.08	337.57	337.73	27.45	2104052.45	127388.75	0.84	
4778.00	50.640	358.610	4657.34	362.34	362.49	26.88	2104051.88	127413.52	0.58	
4809.00	49.810	358.280	4677.17	386.16	386.31	26.23	2104051.23	127437.33	2.80	
4841.00	49.610	358.340	4697.87	410.56	410.71	25.51	2104050.51	127461.73	0.64	
4872.00	51.810	358.300	4717.50	434.54	434.69	24.81	2104049.81	127485.72	7.10	
4903.00	55.060	359.130	4735.96	459.43	459.58	24.25	2104049.25	127510.61	10.70	
4935.00	58.340	359.620	4753.53	486.18	486.32	23.96	2104048.96	127537.35	10.33	
4967.00	61.140	0.050	4769.65	513.81	513.96	23.88	2104048.89	127564.99	8.83	
4999.00	64.020	359.190	4784.39	542.21	542.36	23.69	2104048.69	127593.39	9.31	
5030.00	66.960	358.530	4797.25	570.41	570.56	23.13	2104048.13	127621.59	9.68	
5062.00	70.020	358.120	4808.98	600.17	600.31	22.26	2104047.26	127651.34	9.64	
5093.00	72.780	358.730	4818.86	629.54	629.68	21.45	2104046.45	127680.71	9.10	
5125.00	75.080	358.630	4827.72	660.29	660.42	20.74	2104045.75	127711.45	7.19	
5157.00	77.590	359.210	4835.28	691.38	691.50	20.16	2104045.16	127742.54	8.04	
5188.00	79.570	358.860	4841.42	721.76	721.88	19.65	2104044.65	127772.92	6.48	
5220.00	81.900	359.390	4846.57	753.34	753.46	19.17	2104044.17	127804.50	7.46	
5247.00	83.630	359.420	4849.97	780.12	780.24	18.89	2104043.89	127831.29	6.41	
5316.00	89.140	358.570	4854.32	848.95	849.07	17.68	2104042.68	127900.11	8.08	
5411.00	90.090	358.270	4854.96	943.93	944.03	15.06	2104040.06	127995.08	1.05	
5506.00	91.290	357.720	4853.81	1038.88	1038.96	11.74	2104036.74	128090.02	1.39	
5601.00	91.230	357.710	4851.72	1133.80	1133.86	7.95	2104032.95	128184.93	0.06	
5696.00	90.860	357.160	4849.99	1228.71	1228.75	3.70	2104028.70	128279.82	0.70	
5791.00	89.410	356.490	4849.77	1323.59	1323.60	-1.56	2104023.44	128374.68	1.68	
5886.00	88.570	356.150	4851.44	1418.41	1418.39	-7.66	2104017.34	128469.47	0.95	
5981.00	91.280	357.190	4851.57	1513.27	1513.22	-13.18	2104011.82	128564.30	3.06	
6076.00	91.020	356.740	4849.66	1608.14	1608.07	-18.21	2104006.79	128659.16	0.55	
6171.00	90.530	355.740	4848.38	1702.96	1702.85	-24.44	2104000.56	128753.95	1.17	
6266.00	90.280	356.750	4847.70	1797.79	1797.64	-30.66	2103994.34	128848.75	1.10	
6361.00	91.450	355.900	4846.27	1892.61	1892.44	-36.75	2103988.25	128943.54	1.52	
6455.00	92.760	0.640	4842.81	1986.49	1986.30	-39.58	2103985.42	129037.41	5.23	
6550.00	92.620	359.210	4838.36	2081.38	2081.19	-39.71	2103985.29	129132.31	1.51	



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Area	Kansas	Well	SL (2440 FNL, 660 FWL)
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Brad 3508 2-12H (Unit 310) Actual
Facility	Brad 3508 2-12H Sec 12-35S-8W		

WELLPATH DATA (121 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
6645.00	92.120	358.700	4834.43	2176.30	2176.09	-41.44	2103983.56	129227.22	0.75	
6740.00	91.690	0.540	4831.27	2271.24	2271.04	-42.07	2103982.93	129322.17	1.99	
6835.00	90.880	0.570	4829.14	2366.20	2366.01	-41.15	2103983.85	129417.14	0.85	
6910.00	90.189	0.098	4828.44	2441.19	2441.00	-40.71	2103984.29	129492.14	1.12	Sec Crossing 6910MD(4828TVD) 0'FSL,632'FWL
6924.00	90.060	0.010	4828.41	2455.19	2455.00	-40.70	2103984.30	129506.14	1.12	
6987.00	90.650	359.840	4828.02	2518.19	2518.00	-40.78	2103984.22	129569.14	0.97	
7050.00	89.880	0.290	4827.73	2581.19	2581.00	-40.71	2103984.29	129632.15	1.42	
7145.00	89.970	0.510	4827.85	2676.18	2676.00	-40.04	2103984.95	129727.15	0.25	
7240.00	91.760	0.830	4826.42	2771.15	2770.97	-38.93	2103986.06	129822.13	1.91	
7335.00	91.660	1.250	4823.58	2866.08	2865.92	-37.21	2103987.79	129917.08	0.45	
7430.00	92.100	1.590	4820.47	2960.99	2960.84	-34.86	2103990.14	130012.00	0.59	
7524.00	92.160	2.010	4816.97	3054.86	3054.72	-31.91	2103993.09	130105.90	0.45	
7619.00	92.490	2.460	4813.12	3149.68	3149.57	-28.20	2103996.79	130200.75	0.59	
7713.00	90.490	2.070	4810.67	3243.55	3243.46	-24.49	2104000.51	130294.65	2.17	
7808.00	89.780	2.720	4810.45	3338.44	3338.38	-20.52	2104004.48	130389.57	1.01	
7903.00	90.030	1.310	4810.61	3433.36	3433.32	-17.18	2104007.82	130484.51	1.51	
7998.00	90.920	0.550	4809.82	3528.33	3528.30	-15.64	2104009.36	130579.50	1.23	
8093.00	91.420	0.700	4807.88	3623.30	3623.27	-14.60	2104010.40	130674.48	0.55	
8188.00	91.200	0.470	4805.71	3718.26	3718.24	-13.63	2104011.37	130769.46	0.33	
8283.00	91.510	0.450	4803.46	3813.23	3813.22	-12.87	2104012.13	130864.43	0.33	
8378.00	91.690	0.790	4800.81	3908.18	3908.17	-11.84	2104013.16	130959.39	0.40	
8473.00	91.720	1.160	4797.98	4003.11	4003.12	-10.23	2104014.77	131054.34	0.39	
8567.00	91.630	1.490	4795.24	4097.03	4097.05	-8.06	2104016.94	131148.28	0.36	
8662.00	92.160	1.830	4792.09	4191.92	4191.96	-5.30	2104019.69	131243.20	0.66	
8757.00	91.820	2.380	4788.79	4286.78	4286.84	-1.82	2104023.18	131338.08	0.68	
8852.00	91.260	1.660	4786.24	4381.66	4381.74	1.53	2104026.53	131432.99	0.96	
8947.00	91.230	2.250	4784.18	4476.56	4476.66	4.77	2104029.77	131527.92	0.62	
9042.00	90.280	1.290	4782.93	4571.49	4571.61	7.70	2104032.70	131622.87	1.42	
9136.00	90.030	1.950	4782.67	4665.44	4665.57	10.36	2104035.36	131716.84	0.75	
9168.00	90.250	1.800	4782.59	4697.41	4697.55	11.41	2104036.41	131748.82	0.83	
9211.00	90.250	1.800	4782.41	4740.38	4740.53	12.76	2104037.76	131791.80	0.00	BHL 9211MD(4782TVD) 2990'FNL,700'FWL



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Area	Kansas	Well	SL (2440 FNL, 660 FWL)
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Brad 3508 2-12H (Unit 310) Actual
Facility	Brad 3508 2-12H Sec 12-35S-8W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Brad 3508 2-12H Plan 1 PBHL 2310 FSL, 660 FWL Sec 1		4783.78	4750.73	-27.00	2103998.00	131802.00	37°01'41.138"N	98°08'37.603"W	point

WELLPATH COMPOSITION - Ref Wellbore: Brad 3508 2-12H (Unit 310) Actual Ref Wellpath: AWP-Final					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
15.00	735.00	Generic gyro - northseeking (Standard)	Gyro Surveys	Brad 3508 2-12H (Unit 310) Actual	
735.00	9168.00	NaviTrak (Standard)	INTEQ MWD	Brad 3508 2-12H (Unit 310) Actual	
9168.00	9211.00	Blind Drilling (std)	Projection to bit	Brad 3508 2-12H (Unit 310) Actual	