

Sandridge Energy

Britt 3406 4-20H SL 200' FNL, 1660' FWL (Final)

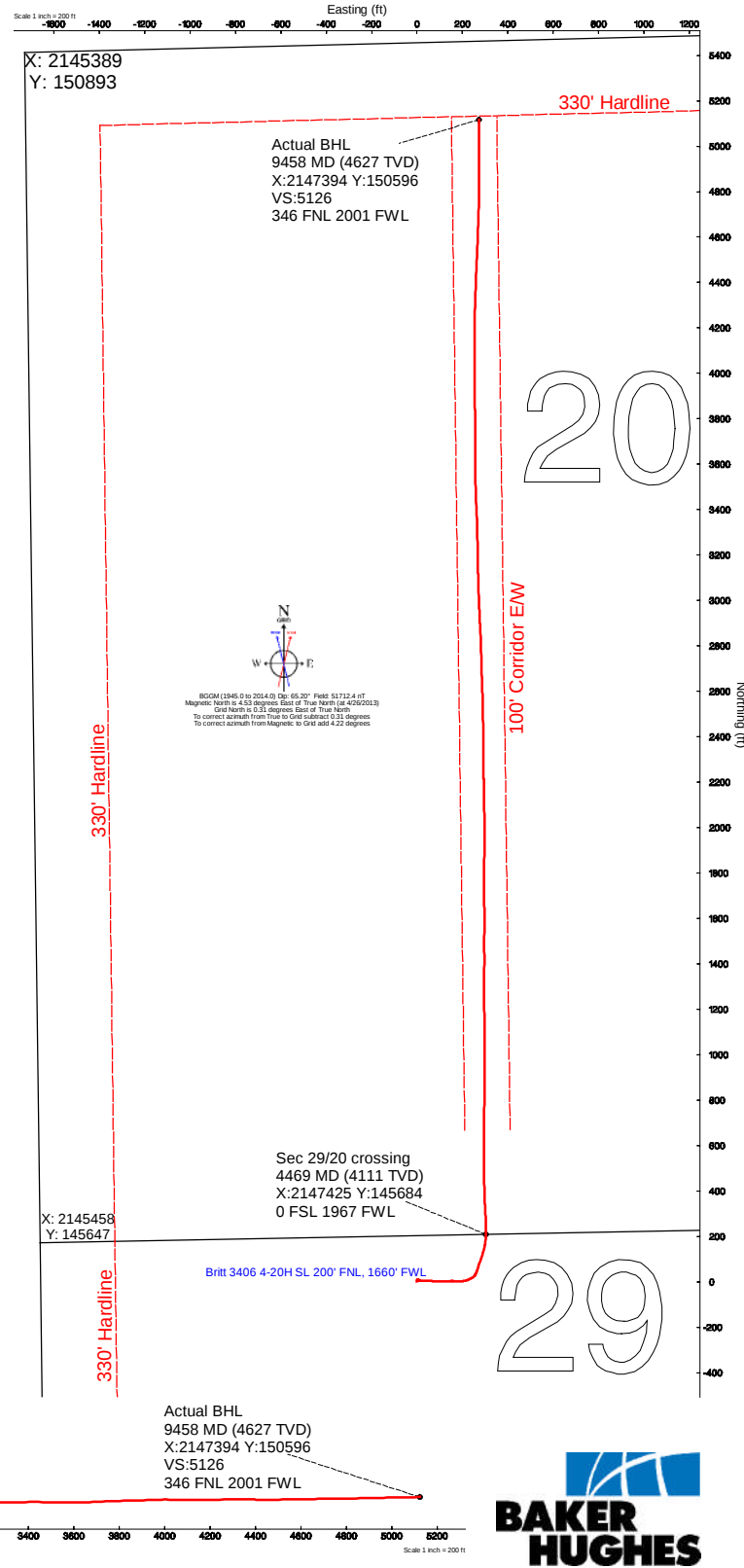
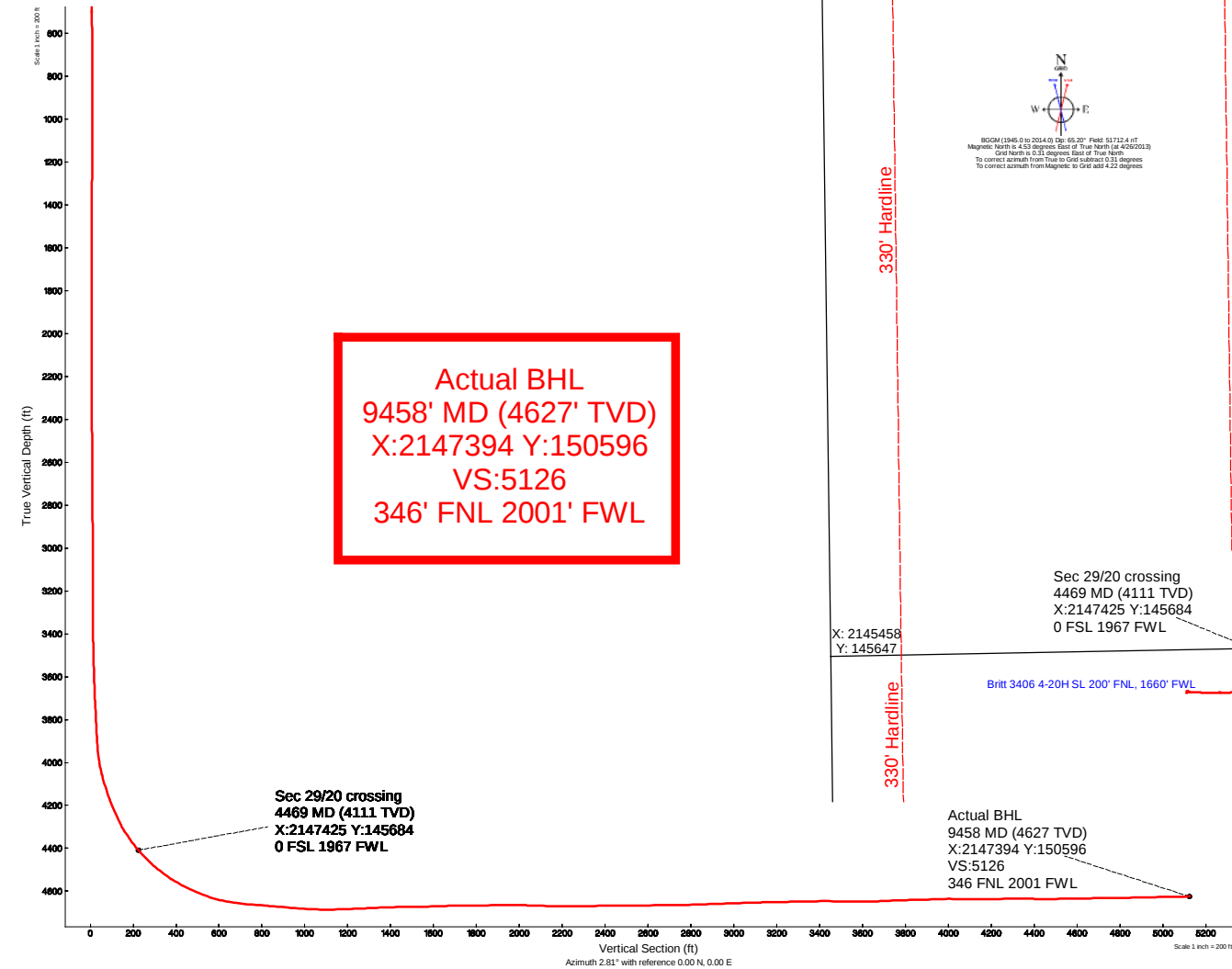
Britt 3406 4-20H SL 200' FNL, 1660' FWL

Harper County, Kansas (Sandridge Energy) NAD27 / Grid

Pilot reference wellpath is Plan 1		Grid System: NAD27 / Lambert Kansas SP, Southern Zone (1502), US feet	
True vertical depths are referenced to Unit 310 (KB)		North Reference: Grid north	
Measured depths are referenced to Unit 310 (KB)		Scale: True distance	
Unit 310 (KB) to Mean Sea Level: 1309 feet		Depths are in feet	
Mean Sea Level to Mud line (At Slot: Britt 3406 4-20H SL 200' FNL, 1660' FWL): -1294 feet		Created by: boomart on 4/26/2013	
Coordinates are in feet referenced to Slot			

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Britt 3406 4-20H Sec. 29-34S-6W			2147121.000	145477.000	37°03'54.375"N	97°59'44.951"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Britt 3406 4-20H SL 200' FNL, 1660' FWL	0.00	0.00	2147121.000	145477.000	37°03'54.375"N	97°59'44.951"W
Unit 310 (KB) to Mud line (At Slot: Britt 3406 4-20H SL 200' FNL, 1660' FWL)					15ft	
Mean Sea Level to Mud line (At Slot: Britt 3406 4-20H SL 200' FNL, 1660' FWL)					-1294ft	
Unit 310 (KB) to Mean Sea Level					1309ft	





Actual Wellpath Report

Sandridge Britt 3406 4-20H (Unit 310)_Final Surveys.
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Britt 3406 4-20H (Unit 310)
Area	Kansas	Well	Britt 4-20H SL(200 FNL, 1660 FWL) Sec 29
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Actual Britt 3406 4-20H
Facility	Britt 4-20H and Taylor 3-29H PAD Sec 29-34S-6W		

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	0.31° East	User	Adammic
Scale	1.00005	Report Generated	10/Jun/2013 at 9:59:15 AM
Wellbore last revised	05-13-2013	Database/Source file	intokcapp01

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	2147121.00	145477.00	37°03'54.375"N	97°59'44.951"W
Facility Reference Pt			2147121.00	145477.00	37°03'54.375"N	97°59'44.951"W
Field Reference Pt			2132248.82	161602.28	37°06'34.560"N	98°02'47.460"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Unit 310 (KB) to Facility Vertical Datum	15.00ft
Horizontal Reference Pt	Slot	Unit 310 (KB) to Mean Sea Level	1310.00ft
Vertical Reference Pt	Unit 310 (KB)	Unit 310 (KB) to Mud Line at Slot (Britt 3406 4-20H (Unit 310))	15.00ft
MD Reference Pt	Unit 310 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	2.81°



Actual Wellpath Report

Sandridge Britt 3406 4-20H (Unit 310)_Final Surveys.
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Area	Kansas	Well	Britt 4-20H SL(200 FNL, 1660 FWL) Sec 29
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Actual Britt 3406 4-20H
Facility	Britt 4-20H and Taylor 3-29H PAD Sec 29-34S-6W		

WELLPATH DATA (132 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]	Comments
0.00†	0.000	19.350	0.00	0.00	0.00	0.00	2147121.00	145477.00	0.00	
15.00	0.000	19.350	15.00	0.00	0.00	0.00	2147121.00	145477.00	0.00	
244.00	0.750	19.350	243.99	1.44	1.41	0.50	2147121.50	145478.41	0.33	
500.00	0.750	19.350	499.97	4.65	4.58	1.61	2147122.61	145481.58	0.00	
654.00	1.000	19.350	653.95	6.90	6.79	2.39	2147123.39	145483.79	0.16	
725.00	0.040	19.350	724.95	7.52	7.40	2.60	2147123.60	145484.40	1.35	
1000.00	0.040	17.580	999.95	7.71	7.58	2.66	2147123.66	145484.59	0.00	
1184.00	1.000	113.660	1183.94	7.20	7.00	4.15	2147125.15	145484.00	0.55	
1214.00	1.640	123.660	1213.93	6.88	6.66	4.75	2147125.75	145483.66	2.26	
1245.00	2.320	125.240	1244.91	6.32	6.05	5.63	2147126.63	145483.05	2.20	
1276.00	3.350	116.940	1275.88	5.61	5.28	6.95	2147127.95	145482.28	3.57	
1306.00	4.250	110.630	1305.81	4.91	4.49	8.77	2147129.77	145481.49	3.30	
1367.00	5.090	98.770	1366.61	3.94	3.28	13.56	2147134.56	145480.28	2.09	
1459.00	5.030	88.890	1458.25	3.79	2.74	21.63	2147142.63	145479.74	0.95	
1551.00	5.130	95.120	1549.89	3.90	2.45	29.76	2147150.76	145479.45	0.61	
1642.00	5.080	90.840	1640.53	3.88	2.03	37.84	2147158.84	145479.03	0.42	
1734.00	5.050	85.580	1732.17	4.53	2.28	45.95	2147166.95	145479.28	0.51	
1829.00	5.090	91.050	1826.80	5.19	2.52	54.33	2147175.33	145479.52	0.51	
1923.00	5.110	97.770	1920.43	4.95	1.88	62.65	2147183.65	145478.88	0.64	
2018.00	5.070	96.840	2015.05	4.29	0.81	71.01	2147192.01	145477.81	0.10	
2113.00	5.090	98.910	2109.68	3.55	-0.34	79.34	2147200.34	145476.66	0.19	
2207.00	4.990	90.510	2203.32	3.27	-1.03	87.54	2147208.55	145475.97	0.79	
2302.00	5.090	89.260	2297.95	3.70	-1.01	95.89	2147216.89	145475.99	0.16	
2397.00	5.020	82.990	2392.58	4.67	-0.45	104.23	2147225.23	145476.55	0.59	
2491.00	4.990	89.380	2486.22	5.61	0.10	112.40	2147233.40	145477.10	0.59	
2586.00	5.110	95.160	2580.86	5.69	-0.24	120.74	2147241.75	145476.76	0.55	
2681.00	5.400	89.290	2675.46	5.79	-0.56	129.43	2147250.43	145476.44	0.64	
2776.00	5.170	84.730	2770.05	6.67	-0.11	138.16	2147259.17	145476.89	0.50	
2871.00	5.070	83.490	2864.68	7.95	0.76	146.59	2147267.60	145477.76	0.16	
2966.00	4.990	88.960	2959.31	8.91	1.31	154.89	2147275.90	145478.31	0.51	
3061.00	5.800	92.340	3053.89	9.22	1.19	163.82	2147284.83	145478.19	0.92	
3156.00	6.040	98.360	3148.38	8.78	0.26	173.56	2147294.57	145477.26	0.70	
3251.00	5.750	89.970	3242.88	8.53	-0.46	183.27	2147304.27	145476.54	0.96	
3346.00	5.620	86.970	3337.42	9.24	-0.21	192.67	2147313.68	145476.79	0.34	
3441.00	5.680	80.720	3431.95	10.70	0.79	201.96	2147322.96	145477.79	0.65	
3535.00	5.670	80.010	3525.49	12.70	2.35	211.12	2147332.13	145479.35	0.08	
3630.00	5.630	71.030	3620.03	15.47	4.68	220.15	2147341.16	145481.68	0.93	
3725.00	5.880	63.490	3714.56	19.59	8.36	228.91	2147349.92	145485.36	0.84	
3820.00	5.770	64.350	3809.07	24.24	12.60	237.57	2147358.58	145489.60	0.15	
3915.00	5.990	60.000	3903.57	29.21	17.15	246.17	2147367.18	145494.15	0.52	
3946.00	7.380	49.790	3934.36	31.44	19.24	249.09	2147370.10	145496.24	5.88	
3978.00	9.100	42.360	3966.03	34.80	22.44	252.36	2147373.37	145499.44	6.31	
4009.00	10.700	35.290	3996.56	39.11	26.60	255.68	2147376.69	145503.60	6.47	
4041.00	12.670	25.950	4027.90	44.85	32.18	258.93	2147379.94	145509.18	8.52	
4073.00	14.510	20.100	4059.01	51.90	39.10	261.84	2147382.86	145516.10	7.17	



Actual Wellpath Report

Sandridge Britt 3406 4-20H (Unit 310)_Final Surveys.
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Britt 3406 4-20H (Unit 310)
Area	Kansas	Well	Britt 4-20H SL(200 FNL, 1660 FWL) Sec 29
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Actual Britt 3406 4-20H
Facility	Britt 4-20H and Taylor 3-29H PAD Sec 29-34S-6W		

WELLPATH DATA (132 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]	Comments
4104.00	16.670	19.350	4088.86	59.88	46.95	264.65	2147385.66	145523.95	7.00	
4136.00	19.040	19.590	4119.32	69.27	56.19	267.92	2147388.94	145533.20	7.41	
4167.00	19.570	18.570	4148.58	79.11	65.88	271.27	2147392.28	145542.88	2.03	
4199.00	20.550	18.390	4178.64	89.68	76.29	274.75	2147395.76	145553.29	3.07	
4230.00	22.970	18.720	4207.42	100.74	87.18	278.41	2147399.42	145564.19	7.82	
4262.00	24.730	18.480	4236.69	113.19	99.45	282.54	2147403.55	145576.45	5.51	
4294.00	26.370	18.310	4265.56	126.49	112.54	286.89	2147407.90	145589.55	5.13	
4325.00	28.940	17.290	4293.02	140.38	126.24	291.28	2147412.30	145603.25	8.43	
4357.00	31.960	14.290	4320.60	156.19	141.85	295.68	2147416.69	145618.85	10.56	
4389.00	34.530	10.370	4347.37	173.48	158.98	299.40	2147420.41	145635.99	10.47	
4420.00	36.380	7.140	4372.62	191.36	176.75	302.12	2147423.14	145653.76	8.49	
4452.00	38.610	2.640	4398.01	210.81	196.14	303.76	2147424.78	145673.15	11.03	
4469.00†	40.299	1.419	4411.14	221.62	206.94	304.15	2147425.16	145683.95	10.94	Sec 29/20 crossing 4469 MD (4111 TVD) X:2147425 Y:145684 0 FSL 1967 FWL
4484.00	41.800	0.410	4422.45	231.46	216.79	304.30	2147425.31	145693.80	10.94	
4516.00	44.500	358.750	4445.79	253.31	238.67	304.13	2147425.15	145715.68	9.15	
4547.00	47.020	357.960	4467.42	275.45	260.87	303.49	2147424.51	145737.88	8.33	
4579.00	49.380	357.580	4488.75	299.21	284.70	302.56	2147423.58	145761.71	7.43	
4611.00	52.290	357.350	4508.95	323.91	309.49	301.46	2147422.48	145786.50	9.11	
4642.00	55.040	357.200	4527.32	348.76	334.43	300.28	2147421.29	145811.44	8.88	
4674.00	57.410	357.730	4545.11	375.24	361.00	299.10	2147420.11	145838.01	7.53	
4705.00	59.790	357.930	4561.26	401.60	387.44	298.10	2147419.11	145864.46	7.70	
4737.00	62.280	358.500	4576.75	429.51	415.42	297.23	2147418.24	145892.44	7.94	
4769.00	64.520	359.140	4591.08	458.05	444.02	296.64	2147417.66	145921.04	7.22	
4800.00	66.380	359.240	4603.96	486.19	472.22	296.24	2147417.26	145949.24	6.01	
4832.00	68.540	359.080	4616.23	515.68	501.77	295.81	2147416.82	145978.79	6.77	
4863.00	71.460	359.510	4626.83	544.75	530.89	295.45	2147416.47	146007.92	9.51	
4895.00	74.190	0.100	4636.28	575.28	561.46	295.35	2147416.36	146038.49	8.71	
4927.00	76.710	0.840	4644.32	606.23	592.43	295.61	2147416.62	146069.46	8.19	
4958.00	79.070	0.590	4650.82	636.51	622.74	295.98	2147417.00	146099.77	7.65	
4990.00	81.470	0.430	4656.23	668.03	654.28	296.26	2147417.28	146131.30	7.52	
5053.00	85.410	0.330	4663.42	730.54	716.85	296.68	2147417.69	146193.88	6.26	
5148.00	85.230	0.600	4671.17	825.15	811.53	297.45	2147418.46	146288.56	0.34	
5242.00	85.250	0.380	4678.97	918.75	905.20	298.25	2147419.26	146382.24	0.23	
5337.00	86.150	0.000	4686.10	1013.38	999.93	298.56	2147419.58	146476.98	1.03	
5369.00	88.830	359.600	4687.50	1045.30	1031.90	298.45	2147419.46	146508.94	8.47	
5445.00	90.280	359.950	4688.09	1121.19	1107.89	298.15	2147419.16	146584.94	1.96	
5508.00	92.310	358.760	4686.67	1184.05	1170.87	297.44	2147418.46	146647.92	3.73	
5603.00	92.540	0.060	4682.65	1278.80	1265.78	296.47	2147417.48	146742.83	1.39	
5698.00	92.340	0.420	4678.60	1373.62	1360.69	296.86	2147417.88	146837.75	0.43	
5792.00	90.620	359.750	4676.17	1467.48	1454.65	297.00	2147418.02	146931.72	1.96	
5887.00	91.620	0.510	4674.32	1562.35	1549.63	297.22	2147418.23	147026.70	1.32	
5981.00	91.580	359.340	4671.69	1656.19	1643.60	297.09	2147418.11	147120.67	1.24	
6076.00	90.530	359.700	4669.94	1751.02	1738.57	296.30	2147417.31	147215.65	1.17	
6171.00	90.930	0.730	4668.73	1845.91	1833.56	296.66	2147417.67	147310.64	1.16	
6266.00	90.590	0.410	4667.47	1940.83	1928.55	297.60	2147418.61	147405.64	0.49	



Actual Wellpath Report

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WELLPATH DATA (132 stations)											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments	
6361.00	88.000	359.650	4668.64	2035.70	2023.54	297.65	2147418.66	147500.62	2.84		
6456.00	88.410	358.470	4671.62	2130.45	2118.47	296.09	2147417.11	147595.57	1.31		
6551.00	89.410	359.400	4673.42	2225.21	2213.44	294.33	2147415.34	147690.53	1.44		
6644.00	91.670	359.670	4672.55	2318.05	2306.42	293.57	2147414.59	147783.53	2.45		
6705.00	90.990	359.110	4671.13	2378.93	2367.40	292.92	2147413.94	147844.51	1.44		
6766.00	90.400	359.260	4670.39	2439.80	2428.39	292.06	2147413.07	147905.50	1.00		
6860.00	90.370	358.770	4669.76	2533.59	2522.38	290.44	2147411.45	147999.49	0.52		
6924.00	91.290	358.360	4668.83	2597.41	2586.35	288.84	2147409.85	148063.46	1.57		
7019.00	89.440	358.030	4668.23	2692.09	2681.30	285.85	2147406.86	148158.41	1.98		
7082.00	92.190	358.430	4667.33	2754.88	2744.25	283.90	2147404.91	148221.37	4.41		
7177.00	91.700	357.690	4664.11	2849.50	2839.14	280.69	2147401.70	148316.27	0.93		
7240.00	92.170	356.950	4661.98	2912.17	2902.04	277.74	2147398.75	148379.16	1.39		
7272.00	92.130	357.370	4660.78	2943.99	2933.98	276.16	2147397.17	148411.10	1.32		
7303.00	91.880	357.240	4659.70	2974.83	2964.92	274.70	2147395.71	148442.05	0.91		
7398.00	91.980	358.290	4656.50	3069.41	3059.80	271.00	2147392.01	148536.93	1.11		
7461.00	91.170	359.110	4654.76	3132.22	3122.75	269.57	2147390.58	148599.89	1.83		
7525.00	91.450	358.930	4653.30	3196.06	3186.73	268.47	2147389.49	148663.87	0.52		
7619.00	90.590	358.790	4651.63	3289.82	3280.69	266.60	2147387.62	148757.84	0.93		
7714.00	91.630	357.370	4649.79	3384.48	3375.62	263.42	2147384.43	148852.77	1.85		
7809.00	87.780	357.930	4650.28	3479.07	3470.52	259.53	2147380.54	148947.67	4.10		
7873.00	89.750	359.170	4651.66	3542.88	3534.48	257.91	2147378.92	149011.63	3.64		
7936.00	89.910	359.070	4651.84	3605.75	3597.47	256.94	2147377.95	149074.63	0.30		
7999.00	93.070	0.050	4650.20	3668.62	3660.44	256.46	2147377.47	149137.60	5.25		
8094.00	92.190	359.870	4645.85	3763.40	3755.34	256.39	2147377.40	149232.50	0.95		
8189.00	91.630	359.440	4642.68	3858.20	3850.28	255.82	2147376.83	149327.45	0.74		
8284.00	92.250	0.000	4639.46	3953.01	3945.23	255.36	2147376.37	149422.40	0.88		
8379.00	88.400	358.760	4638.92	4047.81	4040.20	254.33	2147375.34	149517.38	4.26		
8474.00	90.000	0.480	4640.25	4142.65	4135.18	253.70	2147374.71	149612.36	2.47		
8569.00	91.490	0.930	4639.02	4237.58	4230.16	254.87	2147375.88	149707.35	1.64		
8632.00	91.390	1.530	4637.43	4300.53	4293.13	256.22	2147377.23	149770.32	0.97		
8727.00	87.590	2.110	4638.28	4395.50	4388.06	259.24	2147380.25	149865.25	4.05		
8790.00	90.490	2.210	4639.33	4458.48	4451.00	261.61	2147382.62	149928.19	4.61		
8853.00	92.040	3.030	4637.94	4521.46	4513.92	264.49	2147385.50	149991.11	2.78		
8948.00	90.370	1.750	4635.94	4616.43	4608.81	268.45	2147389.46	150086.01	2.21		
9011.00	90.220	1.890	4635.62	4679.42	4671.77	270.45	2147391.46	150148.98	0.33		
9075.00	90.150	1.760	4635.41	4743.41	4735.74	272.49	2147393.50	150212.95	0.23		
9138.00	91.690	0.620	4634.40	4806.37	4798.72	273.80	2147394.81	150275.93	3.04		
9201.00	92.130	0.600	4632.30	4869.29	4861.68	274.47	2147395.48	150338.89	0.70		
9264.00	90.680	359.500	4630.76	4932.20	4924.66	274.52	2147395.53	150401.87	2.89		
9327.00	91.050	359.670	4629.81	4995.09	4987.65	274.06	2147395.08	150464.87	0.65		
9415.00	91.260	359.590	4628.03	5082.93	5075.63	273.50	2147394.51	150552.85	0.26		
9458.00	91.260	359.590	4627.09	5125.86	5118.62	273.19	2147394.20	150595.84	0.00	Actual BHL 9458 MD (4627 TVD) X:2147394 Y:150596 VS:5126 346 FNL 2001 FWL	

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
PBHL 330' FNL, 1980' FWL		4638.34	5128.78	251.99	2147373.00	150606.00	37°04'45.071"N	97°59'41.499"W	point

WELLPATH COMPOSITION - Ref Wellbore: Actual Britt 3406 4-20H Ref Wellpath: AWP (Final)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	654.00	Generic gyro - northseeking (Standard)	Rig Survey	Actual Britt 3406 4-20H
654.00	9415.00	NaviTrak (Standard)	INTEQ MWD	Actual Britt 3406 4-20H
9415.00	9458.00	Blind Drilling (std)	Projection to bit	Actual Britt 3406 4-20H