

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot B
Area	Tyler County, WV	Well	SHR-40B-HS ST01
Field	Tyler	Wellbore	SHR-40B-HS ST01 AWB
Facility	SHR-40 Pad	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD

### REPORT SETUP INFORMATION

Projection System	NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet	Software System	WellArchitect® 4.0.1
North Reference	Grid	User	Edsaryar
Scale	0.999947	Report Generated	11/Jun/2015 at 16:27
Convergence at slot	0.85° West	Database/Source file	WellArchitectEasternDB/SHR-40B-HS_ST01_AWB.xml

### WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North [ft]	East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Location	-16.71	-10.28	1622912.31	336025.75	39°24'53.633"N	80°50'04.998"W
Facility Reference Pt			1622922.59	336042.46	39°24'53.800"N	80°50'04.870"W
Field Reference Pt			609601.22	0.00	38°23'48.753"N	84°21'09.765"W

### WELLPATH DATUM

Calculation method	Minimum curvature	Precision 542 (RKB) to Facility Vertical Datum	788.90ft
Horizontal Reference Pt	Slot	Precision 542 (RKB) to Mean Sea Level	788.90ft
Vertical Reference Pt	Precision 542 (RKB)	Precision 542 (RKB) to Mud Line at Slot (Slot B)	19.40ft
MD Reference Pt	Precision 542 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	160.00°



# Actual Wellpath Report

SHR-40B-HS ST01 AWP Proj: 16311'  
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## WELLPATH DATA (200 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]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
0.00†	0.000	113.490	0.00	0.00	0.00	0.00	1622912.31	336025.75	39°24'53.633"N	80°50'04.998"W	0.00	0.000	0.00	0.00	0.00
19.40	0.000	113.490	19.40	0.00	0.00	0.00	1622912.31	336025.75	39°24'53.633"N	80°50'04.998"W	0.00	0.000	0.00	0.00	0.00
104.00	0.170	113.490	104.00	0.09	-0.05	0.12	1622912.43	336025.70	39°24'53.633"N	80°50'04.996"W	0.13	113.490	0.20	0.20	0.00
204.00	0.290	163.950	204.00	0.44	-0.35	0.32	1622912.63	336025.40	39°24'53.630"N	80°50'04.994"W	0.48	137.655	0.22	0.12	50.46
304.00	0.540	155.140	304.00	1.16	-1.02	0.59	1622912.90	336024.73	39°24'53.623"N	80°50'04.990"W	1.18	150.063	0.26	0.25	-8.81
404.00	0.470	153.080	403.99	2.04	-1.82	0.97	1622913.28	336023.93	39°24'53.616"N	80°50'04.985"W	2.06	151.823	0.07	-0.07	-2.06
504.00	0.460	154.200	503.99	2.85	-2.54	1.33	1622913.64	336023.21	39°24'53.608"N	80°50'04.980"W	2.87	152.335	0.01	-0.01	1.12
604.00	0.690	149.920	603.98	3.84	-3.43	1.81	1622914.12	336022.32	39°24'53.600"N	80°50'04.974"W	3.87	152.153	0.23	0.23	-4.28
704.00	0.740	140.950	703.98	5.04	-4.45	2.52	1622914.83	336021.30	39°24'53.590"N	80°50'04.965"W	5.11	150.483	0.12	0.05	-8.97
804.00	0.520	151.260	803.97	6.10	-5.35	3.14	1622915.45	336020.40	39°24'53.581"N	80°50'04.957"W	6.20	149.552	0.25	-0.22	10.31
904.00	0.490	110.270	903.97	6.83	-5.89	3.76	1622916.07	336019.86	39°24'53.576"N	80°50'04.949"W	6.99	147.444	0.35	-0.03	-40.99
1004.00	0.770	101.790	1003.96	7.46	-6.18	4.82	1622917.13	336019.57	39°24'53.573"N	80°50'04.935"W	7.84	142.035	0.29	0.28	-8.48
1104.00	1.000	119.080	1103.95	8.47	-6.74	6.24	1622918.55	336019.01	39°24'53.568"N	80°50'04.917"W	9.19	137.199	0.35	0.23	17.29
1204.00	0.930	117.480	1203.93	9.73	-7.54	7.72	1622920.03	336018.21	39°24'53.560"N	80°50'04.898"W	10.79	134.304	0.08	-0.07	-1.60
1304.00	0.850	116.190	1303.92	10.86	-8.24	9.11	1622921.42	336017.51	39°24'53.553"N	80°50'04.880"W	12.28	132.133	0.08	-0.08	-1.29
1404.00	0.780	99.260	1403.91	11.73	-8.68	10.45	1622922.76	336017.07	39°24'53.549"N	80°50'04.863"W	13.58	129.714	0.25	-0.07	-16.93
1504.00	0.770	88.770	1503.90	12.28	-8.77	11.79	1622924.10	336016.98	39°24'53.548"N	80°50'04.846"W	14.70	126.651	0.14	-0.01	-10.49
1604.00	0.760	86.720	1603.89	12.68	-8.72	13.13	1622925.43	336017.03	39°24'53.549"N	80°50'04.829"W	15.76	123.601	0.03	-0.01	-2.05
1704.00	0.600	75.930	1703.89	12.93	-8.56	14.30	1622926.60	336017.19	39°24'53.551"N	80°50'04.814"W	16.66	120.900	0.20	-0.16	-10.79
1804.00	0.430	64.060	1803.88	12.94	-8.26	15.14	1622927.45	336017.49	39°24'53.554"N	80°50'04.803"W	17.25	118.627	0.20	-0.17	-11.87
1904.00	0.260	111.280	1903.88	13.05	-8.18	15.69	1622928.00	336017.57	39°24'53.555"N	80°50'04.796"W	17.69	117.543	0.32	-0.17	47.22
2004.00	0.590	111.450	2003.88	13.55	-8.45	16.38	1622928.69	336017.30	39°24'53.552"N	80°50'04.788"W	18.43	117.296	0.33	0.33	0.17
2104.00	0.570	84.640	2103.87	14.01	-8.59	17.35	1622929.66	336017.16	39°24'53.551"N	80°50'04.775"W	19.37	116.347	0.27	-0.02	-26.81
2204.00	0.300	48.870	2203.87	14.04	-8.38	18.05	1622930.36	336017.37	39°24'53.553"N	80°50'04.766"W	19.90	114.898	0.37	-0.27	-35.77
2304.00	0.280	167.020	2303.87	14.19	-8.44	18.30	1622930.61	336017.31	39°24'53.553"N	80°50'04.763"W	20.15	114.766	0.50	-0.02	118.15
2404.00	0.160	265.150	2403.87	14.40	-8.69	18.21	1622930.52	336017.06	39°24'53.550"N	80°50'04.764"W	20.18	115.510	0.34	-0.12	98.13
2504.00	0.460	180.770	2503.87	14.74	-9.11	18.07	1622930.38	336016.65	39°24'53.546"N	80°50'04.766"W	20.23	116.742	0.47	0.30	-84.38
2604.00	0.280	257.820	2603.87	15.08	-9.56	17.83	1622930.13	336016.19	39°24'53.542"N	80°50'04.769"W	20.23	118.200	0.48	-0.18	77.05
2704.00	0.460	196.410	2703.87	15.37	-9.99	17.47	1622929.78	336015.76	39°24'53.537"N	80°50'04.773"W	20.13	119.769	0.41	0.18	-61.41
2804.00	0.460	244.340	2803.86	15.73	-10.55	17.00	1622929.31	336015.20	39°24'53.532"N	80°50'04.779"W	20.01	121.834	0.37	0.00	47.93

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Facility	SHR-40 Pad	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD

## WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
2904.00	0.550	195.140	2903.86	16.16	-11.19	16.51	1622928.82	336014.56	39°24'53.525"N	80°50'04.785"W	19.95	124.128	0.43	0.09	-49.20
3004.00	0.440	243.770	3003.86	16.60	-11.82	16.04	1622928.35	336013.93	39°24'53.519"N	80°50'04.791"W	19.93	126.393	0.42	-0.11	48.63
3104.00	0.150	176.070	3103.85	16.76	-12.12	15.71	1622928.02	336013.63	39°24'53.516"N	80°50'04.795"W	19.84	127.666	0.41	-0.29	-67.70
3204.00	0.540	203.810	3203.85	17.23	-12.69	15.52	1622927.83	336013.06	39°24'53.510"N	80°50'04.798"W	20.05	129.253	0.41	0.39	27.74
3304.00	0.090	251.130	3303.85	17.57	-13.14	15.26	1622927.57	336012.61	39°24'53.506"N	80°50'04.801"W	20.14	130.736	0.48	-0.45	47.32
3404.00	0.510	193.240	3403.85	17.94	-13.60	15.08	1622927.39	336012.15	39°24'53.501"N	80°50'04.803"W	20.31	132.040	0.47	0.42	-57.89
3504.00	0.040	306.560	3503.85	18.28	-14.01	14.95	1622927.26	336011.74	39°24'53.497"N	80°50'04.805"W	20.49	133.140	0.53	-0.47	113.32
3604.00	0.300	282.030	3603.85	18.11	-13.94	14.67	1622926.98	336011.81	39°24'53.498"N	80°50'04.808"W	20.24	133.535	0.26	0.26	-24.53
3629.00	0.400	246.770	3628.85	18.08	-13.96	14.53	1622926.83	336011.79	39°24'53.498"N	80°50'04.810"W	20.15	133.860	0.93	0.40	-141.04
3684.00	1.680	54.990	3683.84	17.89	-13.57	15.01	1622927.32	336012.18	39°24'53.501"N	80°50'04.804"W	20.24	132.120	3.77	2.33	305.85
3773.00	4.330	48.870	3772.71	16.34	-10.61	18.61	1622930.92	336015.14	39°24'53.531"N	80°50'04.759"W	21.42	119.696	3.00	2.98	-6.88
3861.00	6.620	49.500	3860.30	13.36	-5.13	24.97	1622937.28	336020.62	39°24'53.586"N	80°50'04.679"W	25.49	101.616	2.60	2.60	0.72
3950.00	8.810	57.230	3948.49	10.06	1.89	34.60	1622946.91	336027.64	39°24'53.657"N	80°50'04.557"W	34.65	86.875	2.72	2.46	8.69
4038.00	9.530	73.390	4035.38	9.00	7.62	47.25	1622959.56	336033.37	39°24'53.716"N	80°50'04.397"W	47.86	80.839	3.03	0.82	18.36
4126.00	9.520	80.360	4122.17	10.74	10.92	61.41	1622973.71	336036.67	39°24'53.750"N	80°50'04.218"W	62.37	79.916	1.31	-0.01	7.92
4215.00	10.930	87.280	4209.76	14.57	12.55	77.09	1622989.40	336038.30	39°24'53.769"N	80°50'04.018"W	78.11	80.751	2.10	1.58	7.78
4303.00	12.270	84.650	4295.96	19.41	13.82	94.74	1623007.04	336039.57	39°24'53.784"N	80°50'03.793"W	95.74	81.699	1.64	1.52	-2.99
4391.00	14.350	78.470	4381.60	23.39	16.87	114.74	1623027.04	336042.62	39°24'53.817"N	80°50'03.539"W	115.97	81.634	2.86	2.36	-7.02
4480.00	15.190	76.090	4467.66	26.25	21.88	136.86	1623049.16	336047.63	39°24'53.870"N	80°50'03.258"W	138.60	80.916	1.16	0.94	-2.67
4568.00	16.000	73.920	4552.42	28.30	28.01	159.71	1623072.01	336053.76	39°24'53.934"N	80°50'02.968"W	162.14	80.051	1.13	0.92	-2.47
4657.00	17.520	73.120	4637.64	29.87	35.30	184.31	1623096.61	336061.05	39°24'54.009"N	80°50'02.656"W	187.66	79.158	1.73	1.71	-0.90
4745.00	18.970	74.970	4721.21	31.83	42.86	210.80	1623123.10	336068.60	39°24'54.088"N	80°50'02.320"W	215.12	78.508	1.77	1.65	2.10
4834.00	21.470	75.420	4804.72	34.62	50.71	240.54	1623152.84	336076.46	39°24'54.170"N	80°50'01.943"W	245.83	78.096	2.81	2.81	0.51
4922.00	25.570	74.180	4885.39	37.53	59.94	274.41	1623186.71	336085.69	39°24'54.266"N	80°50'01.513"W	280.89	77.678	4.69	4.66	-1.41
5010.00	28.420	71.890	4963.80	39.60	71.63	312.60	1623224.89	336097.38	39°24'54.387"N	80°50'01.029"W	320.70	77.093	3.45	3.24	-2.60
5099.00	29.300	70.540	5041.74	40.51	85.47	353.26	1623265.55	336111.22	39°24'54.530"N	80°50'00.513"W	363.46	76.399	1.23	0.99	-1.52
5187.00	29.470	69.590	5118.42	40.55	100.20	393.85	1623306.14	336125.94	39°24'54.681"N	80°50'00.000"W	406.40	75.727	0.56	0.19	-1.08
5275.00	30.670	71.320	5194.58	40.92	114.93	435.41	1623347.69	336140.68	39°24'54.833"N	80°49'59.473"W	450.32	75.213	1.68	1.36	1.97
5364.00	30.930	71.900	5271.03	42.20	129.31	478.65	1623390.93	336155.05	39°24'54.981"N	80°49'58.924"W	495.81	74.882	0.44	0.29	0.65
5372.00	30.980	71.480	5277.89	42.32	130.60	482.56	1623394.84	336156.35	39°24'54.995"N	80°49'58.875"W	499.92	74.856	2.77	0.63	-5.25



# Actual Wellpath Report

SHR-40B-HS ST01 AWP Proj: 16311'  
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Operator	Slot	Slot B
NOBLE ENERGY	Well	SHR-40B-HS ST01
Tyler County, WV	Wellbore	SHR-40B-HS ST01 AWB
Tyler	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD
SHR-40 Pad		

## WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
5410.00	30.880	71.820	5310.48	42.88	136.75	501.10	1623413.38	336162.49	39°24'55.058"N	80°49'58.640"W	519.42	74.735	0.53	-0.26	0.89
5455.00	31.150	72.240	5349.05	43.70	143.90	523.15	1623435.43	336169.65	39°24'55.132"N	80°49'58.360"W	542.58	74.620	0.77	0.60	0.93
5500.00	29.670	73.530	5387.86	44.84	150.61	544.92	1623457.20	336176.35	39°24'55.202"N	80°49'58.084"W	565.35	74.549	3.59	-3.29	2.87
5545.00	29.520	76.630	5426.99	46.81	156.33	566.38	1623478.66	336182.08	39°24'55.261"N	80°49'57.812"W	587.56	74.569	3.42	-0.33	6.89
5589.00	30.140	79.920	5465.16	49.96	160.77	587.81	1623500.09	336186.52	39°24'55.308"N	80°49'57.540"W	609.40	74.703	3.98	1.41	7.48
5634.00	31.520	81.780	5503.80	54.31	164.43	610.58	1623522.85	336190.18	39°24'55.348"N	80°49'57.250"W	632.33	74.927	3.73	3.07	4.13
5679.00	32.950	81.680	5541.87	59.19	167.89	634.33	1623546.60	336193.63	39°24'55.386"N	80°49'56.948"W	656.17	75.175	3.18	3.18	-0.22
5724.00	35.130	80.450	5579.15	64.02	171.81	659.21	1623571.48	336197.55	39°24'55.428"N	80°49'56.632"W	681.23	75.392	5.08	4.84	-2.73
5769.00	35.160	78.810	5615.95	68.35	176.47	684.69	1623596.96	336202.21	39°24'55.478"N	80°49'56.308"W	707.06	75.547	2.10	0.07	-3.64
5813.00	35.130	78.640	5651.93	72.19	181.42	709.53	1623621.80	336207.16	39°24'55.530"N	80°49'55.993"W	732.35	75.657	0.23	-0.07	-0.39
5858.00	35.090	79.110	5688.74	76.19	186.41	734.92	1623647.19	336212.15	39°24'55.583"N	80°49'55.670"W	758.20	75.767	0.61	-0.09	1.04
5903.00	35.170	80.660	5725.54	80.63	190.96	760.41	1623672.68	336216.70	39°24'55.632"N	80°49'55.346"W	784.02	75.903	1.99	0.18	3.44
5948.00	35.210	81.020	5762.32	85.51	195.09	786.01	1623698.28	336220.83	39°24'55.677"N	80°49'55.021"W	809.86	76.061	0.47	0.09	0.80
5993.00	35.290	80.360	5799.07	90.33	199.29	811.64	1623723.91	336225.03	39°24'55.722"N	80°49'54.695"W	835.75	76.204	0.86	0.18	-1.47
6037.00	35.200	79.540	5835.00	94.71	203.72	836.64	1623748.91	336229.46	39°24'55.769"N	80°49'54.378"W	861.09	76.315	1.09	-0.20	-1.86
6082.00	35.210	79.180	5871.77	98.93	208.51	862.14	1623774.40	336234.25	39°24'55.820"N	80°49'54.054"W	887.00	76.404	0.46	0.02	-0.80
6127.00	35.100	78.040	5908.57	102.81	213.63	887.54	1623799.80	336239.37	39°24'55.875"N	80°49'53.731"W	912.89	76.466	1.48	-0.24	-2.53
6171.00	35.650	81.500	5944.45	107.14	218.15	912.60	1623824.86	336243.88	39°24'55.923"N	80°49'53.413"W	938.31	76.556	4.72	1.25	7.86
6216.00	36.540	90.400	5980.83	114.43	219.99	938.98	1623851.24	336245.73	39°24'55.945"N	80°49'53.077"W	964.41	76.814	11.81	1.98	19.78
6261.00	38.610	100.120	6016.53	126.15	217.43	966.23	1623878.49	336243.17	39°24'55.924"N	80°49'52.729"W	990.39	77.318	13.94	4.60	21.60
6306.00	40.620	102.560	6051.19	141.08	211.78	994.35	1623906.61	336237.51	39°24'55.872"N	80°49'52.370"W	1016.66	77.977	5.65	4.47	5.42
6351.00	41.800	105.520	6085.05	157.68	204.58	1023.11	1623935.36	336230.32	39°24'55.805"N	80°49'52.002"W	1043.36	78.692	5.06	2.62	6.58
6395.00	43.290	111.040	6117.48	176.12	195.23	1051.33	1623963.58	336220.97	39°24'55.717"N	80°49'51.641"W	1069.30	79.480	9.13	3.39	12.55
6440.00	45.770	117.910	6149.57	198.23	182.14	1079.99	1623992.24	336207.88	39°24'55.527"N	80°49'51.273"W	1095.24	80.427	12.04	5.51	15.27
6485.00	49.680	123.740	6179.85	224.05	165.05	1108.53	1624020.78	336190.79	39°24'55.492"N	80°49'50.906"W	1120.75	81.531	12.93	8.69	12.96
6530.00	52.870	127.620	6208.01	253.04	144.56	1137.02	1624049.27	336170.30	39°24'55.229"N	80°49'50.540"W	1146.17	82.754	9.77	7.09	8.62
6575.00	53.670	129.290	6234.92	283.78	122.13	1165.26	1624077.50	336147.87	39°24'55.011"N	80°49'50.176"W	1171.64	84.017	3.47	1.78	3.71
6665.00	58.420	134.940	6285.20	349.75	72.04	1220.51	1624132.76	336097.78	39°24'54.524"N	80°49'49.462"W	1222.64	86.622	7.41	5.28	6.28
6754.00	65.300	140.940	6327.18	422.44	13.76	1272.92	1624185.17	336039.50	39°24'53.956"N	80°49'48.784"W	1273.00	89.381	9.75	7.73	6.74
6799.00	68.850	144.450	6344.71	462.00	-19.21	1298.02	1624210.26	336006.54	39°24'53.634"N	80°49'48.458"W	1298.16	90.848	10.67	7.89	7.80



# Actual Wellpath Report

SHR-40B-HS ST01 AWP Proj: 16311'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot B
Area	Tyler County, WV	Well	SHR-40B-HS ST01
Field	Tyler	Wellbore	SHR-40B-HS ST01 AWB
Facility	SHR-40 Pad	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD

## WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
6844.00	73.020	147.630	6359.41	503.26	-54.48	1321.76	1624234.00	335971.27	39°24'53.289"N	80°49'48.149"W	1322.88	92.360	11.42	9.27	7.07
6889.00	77.250	150.670	6370.96	545.97	-91.81	1344.04	1624256.28	335933.94	39°24'52.923"N	80°49'47.858"W	1347.18	93.908	11.44	9.40	6.76
6934.00	80.290	153.450	6379.72	589.67	-130.80	1364.72	1624276.95	335894.96	39°24'52.541"N	80°49'47.587"W	1370.97	95.475	9.07	6.76	6.18
6979.00	85.620	158.120	6385.24	634.18	-171.51	1383.01	1624295.25	335854.25	39°24'52.141"N	80°49'47.346"W	1393.61	97.069	15.69	11.84	10.38
7023.00	90.890	159.490	6386.58	678.14	-212.50	1398.91	1624311.14	335813.26	39°24'51.738"N	80°49'47.136"W	1414.95	98.637	12.37	11.98	3.11
7113.00	91.050	160.420	6385.06	768.12	-297.03	1429.75	1624341.98	335728.73	39°24'50.907"N	80°49'46.727"W	1460.28	101.736	1.05	0.18	1.03
7203.00	90.400	161.470	6383.92	858.10	-382.09	1459.13	1624371.36	335643.68	39°24'50.071"N	80°49'46.337"W	1508.33	104.674	1.37	-0.72	1.17
7292.00	90.340	160.210	6383.34	947.09	-466.16	1488.34	1624400.57	335559.61	39°24'49.245"N	80°49'45.949"W	1559.63	107.391	1.42	-0.07	-1.42
7382.00	90.220	159.300	6382.90	1037.09	-550.60	1519.48	1624431.71	335475.18	39°24'48.415"N	80°49'45.536"W	1616.16	109.919	1.02	-0.13	-1.01
7471.00	90.220	154.240	6382.56	1125.92	-632.36	1554.57	1624466.80	335393.43	39°24'47.612"N	80°49'45.074"W	1678.26	112.135	5.69	0.00	-5.69
7561.00	90.030	151.640	6382.36	1215.23	-712.50	1595.51	1624507.74	335313.29	39°24'46.826"N	80°49'44.537"W	1747.37	114.064	2.90	-0.21	-2.89
7650.00	89.660	157.060	6382.61	1303.76	-792.70	1634.02	1624546.24	335233.10	39°24'46.039"N	80°49'44.031"W	1816.15	115.879	6.10	-0.42	6.09
7740.00	89.540	162.870	6383.23	1393.72	-877.21	1664.84	1624577.06	335148.59	39°24'45.208"N	80°49'43.623"W	1881.81	117.785	6.46	-0.13	6.46
7830.00	89.720	163.350	6383.82	1483.58	-963.33	1690.99	1624603.21	335062.48	39°24'44.361"N	80°49'43.273"W	1946.14	119.669	0.57	0.20	0.53
7919.00	89.750	163.720	6384.23	1572.41	-1048.68	1716.22	1624628.43	334977.13	39°24'43.521"N	80°49'42.936"W	2011.25	121.427	0.42	0.03	0.42
8009.00	90.340	162.240	6384.16	1662.29	-1134.73	1742.56	1624654.77	334891.08	39°24'42.675"N	80°49'42.584"W	2079.45	123.072	1.77	0.66	-1.64
8098.00	90.180	162.010	6383.75	1751.23	-1219.44	1769.88	1624682.09	334806.38	39°24'41.842"N	80°49'42.220"W	2149.30	124.567	0.31	-0.18	-0.26
8188.00	90.340	163.540	6383.34	1841.12	-1305.40	1796.53	1624708.74	334720.43	39°24'40.996"N	80°49'41.864"W	2220.71	126.003	1.71	0.18	1.70
8278.00	90.340	164.080	6382.81	1930.92	-1391.82	1821.62	1624733.83	334634.00	39°24'40.146"N	80°49'41.529"W	2292.48	127.382	0.60	0.00	0.60
8367.00	90.120	163.280	6382.45	2019.73	-1477.24	1846.63	1624758.84	334548.59	39°24'39.305"N	80°49'41.194"W	2364.80	128.659	0.93	-0.25	-0.90
8457.00	90.150	160.980	6382.24	2109.66	-1562.89	1874.24	1624786.45	334462.95	39°24'38.463"N	80°49'40.826"W	2440.37	129.824	2.56	0.03	-2.56
8546.00	90.030	158.540	6382.10	2198.66	-1646.39	1905.03	1624817.24	334379.45	39°24'37.642"N	80°49'40.418"W	2517.88	130.835	2.74	-0.13	-2.74
8636.00	89.970	158.420	6382.10	2288.62	-1730.11	1938.04	1624850.25	334295.73	39°24'36.819"N	80°49'39.982"W	2597.94	131.756	0.15	-0.07	-0.13
8725.00	90.090	159.230	6382.05	2377.60	-1813.10	1970.19	1624882.40	334212.75	39°24'36.004"N	80°49'39.556"W	2677.50	132.622	0.92	0.13	0.91
8815.00	90.120	158.960	6381.89	2467.59	-1897.18	2002.31	1624914.51	334128.68	39°24'35.178"N	80°49'39.132"W	2758.35	133.456	0.30	0.03	-0.30
8904.00	90.150	159.190	6381.68	2556.58	-1980.31	2034.09	1624946.29	334045.55	39°24'34.361"N	80°49'38.711"W	2838.86	134.232	0.26	0.03	0.26
8994.00	90.180	162.130	6381.42	2646.57	-2065.22	2063.89	1624976.09	333960.64	39°24'33.526"N	80°49'38.315"W	2919.72	135.018	3.27	0.03	3.27
9084.00	90.180	162.340	6381.14	2736.50	-2150.93	2091.35	1625003.55	333874.94	39°24'32.683"N	80°49'37.949"W	3000.04	135.805	0.23	0.00	0.23
9173.00	90.120	160.740	6380.90	2825.46	-2235.35	2119.53	1625031.73	333790.53	39°24'31.853"N	80°49'37.575"W	3080.45	136.523	1.80	-0.07	-1.80
9262.00	90.060	160.110	6380.77	2914.46	-2319.20	2149.35	1625061.55	333706.68	39°24'31.029"N	80°49'37.179"W	3162.03	137.177	0.71	-0.07	-0.71



# Actual Wellpath Report

SHR-40B-HS ST01 AWP Proj: 16311'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot B
Area	Tyler County, WV	Well	SHR-40B-HS ST01
Field	Tyler	Wellbore	SHR-40B-HS ST01 AWB
Facility	SHR-40 Pad	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD

## WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
9352.00	90.150	158.830	6380.60	3004.45	-2403.48	2180.92	1625093.11	333622.40	39°24'30.200"N	80°49'36.761"W	3245.48	137.779	1.43	0.10	-1.42
9441.00	90.090	159.360	6380.41	3093.44	-2486.62	2212.67	1625124.86	333539.26	39°24'29.383"N	80°49'36.341"W	3328.55	138.336	0.60	-0.07	0.60
9531.00	90.120	160.110	6380.25	3183.44	-2571.05	2243.84	1625156.03	333454.84	39°24'28.554"N	80°49'35.928"W	3412.50	138.888	0.83	0.03	0.83
9620.00	90.030	160.220	6380.13	3272.44	-2654.77	2274.04	1625186.23	333371.12	39°24'27.731"N	80°49'35.527"W	3495.58	139.417	0.16	-0.10	0.12
9710.00	89.940	160.710	6380.16	3362.44	-2739.59	2304.14	1625216.32	333286.31	39°24'26.897"N	80°49'35.128"W	3579.72	139.934	0.55	-0.10	0.54
9799.00	90.430	162.620	6379.87	3451.39	-2824.07	2332.13	1625244.32	333201.84	39°24'26.066"N	80°49'34.756"W	3662.54	140.450	2.22	0.55	2.15
9889.00	90.460	161.760	6379.17	3541.32	-2909.75	2359.66	1625271.84	333116.16	39°24'25.223"N	80°49'34.389"W	3746.28	140.960	0.96	0.03	-0.96
9978.00	90.280	158.430	6378.59	3630.31	-2993.42	2389.96	1625302.14	333032.49	39°24'24.401"N	80°49'33.987"W	3830.46	141.396	3.75	-0.20	-3.74
10068.00	90.090	156.510	6378.30	3720.22	-3076.55	2424.44	1625336.62	332949.37	39°24'23.584"N	80°49'33.532"W	3917.02	141.761	2.14	-0.21	-2.13
10157.00	89.940	154.950	6378.28	3808.97	-3157.68	2461.02	1625373.20	332868.24	39°24'22.788"N	80°49'33.051"W	4003.44	142.068	1.76	-0.17	-1.75
10247.00	89.910	157.490	6378.40	3898.76	-3240.03	2497.31	1625409.48	332785.89	39°24'21.979"N	80°49'32.573"W	4090.76	142.376	2.82	-0.03	2.82
10336.00	89.910	160.950	6378.54	3987.74	-3323.23	2528.88	1625441.05	332702.70	39°24'21.162"N	80°49'32.156"W	4176.01	142.730	3.89	0.00	3.89
10426.00	90.310	161.560	6378.37	4077.72	-3408.45	2557.80	1625469.97	332617.48	39°24'20.324"N	80°49'31.771"W	4261.44	143.114	0.81	0.44	0.68
10515.00	90.400	163.260	6377.81	4166.64	-3493.29	2584.69	1625496.86	332532.65	39°24'19.489"N	80°49'31.413"W	4345.54	143.502	1.91	0.10	1.91
10605.00	90.490	162.440	6377.11	4256.52	-3579.28	2611.23	1625523.40	332446.66	39°24'18.643"N	80°49'31.058"W	4430.55	143.888	0.92	0.10	-0.91
10695.00	90.060	158.970	6376.68	4346.50	-3664.21	2640.97	1625553.13	332361.74	39°24'17.808"N	80°49'30.664"W	4516.77	144.218	3.88	-0.48	-3.86
10784.00	90.030	156.020	6376.61	4435.40	-3746.43	2675.03	1625587.19	332279.53	39°24'17.001"N	80°49'30.214"W	4603.42	144.472	3.31	-0.03	-3.31
10874.00	89.660	156.180	6376.86	4525.19	-3828.71	2711.49	1625623.65	332197.25	39°24'16.193"N	80°49'29.734"W	4691.61	144.694	0.45	-0.41	0.18
10963.00	89.690	160.030	6377.36	4614.13	-3911.27	2744.67	1625656.83	332114.69	39°24'15.382"N	80°49'29.296"W	4778.21	144.941	4.33	0.03	4.33
11053.00	89.600	162.690	6377.92	4704.09	-3996.54	2773.44	1625685.59	332029.42	39°24'14.544"N	80°49'28.914"W	4864.60	145.241	2.96	-0.10	2.96
11142.00	89.630	160.230	6378.52	4793.06	-4080.92	2801.73	1625713.89	331945.06	39°24'13.714"N	80°49'28.538"W	4950.11	145.529	2.76	0.03	-2.76
11232.00	90.180	160.430	6378.67	4883.05	-4165.66	2832.03	1625744.18	331860.31	39°24'12.881"N	80°49'28.136"W	5037.17	145.790	0.65	0.61	0.22
11321.00	90.340	160.740	6378.26	4972.05	-4249.60	2861.61	1625773.76	331776.38	39°24'12.056"N	80°49'27.743"W	5123.27	146.044	0.39	0.18	0.35
11411.00	90.250	161.330	6377.80	5062.03	-4334.71	2890.86	1625803.01	331691.27	39°24'11.219"N	80°49'27.355"W	5210.26	146.300	0.66	-0.10	0.66
11501.00	90.030	161.640	6377.58	5152.00	-4420.06	2919.44	1625831.59	331605.94	39°24'10.379"N	80°49'26.975"W	5297.17	146.555	0.42	-0.24	0.34
11591.00	89.970	160.140	6377.58	5241.99	-4505.09	2948.90	1625861.05	331520.90	39°24'09.543"N	80°49'26.583"W	5384.41	146.792	1.67	-0.07	-1.67
11680.00	90.030	156.990	6377.58	5330.95	-4587.93	2981.42	1625893.57	331438.07	39°24'08.729"N	80°49'26.154"W	5471.56	146.983	3.54	0.07	-3.54
11770.00	90.000	153.490	6377.56	5420.62	-4669.64	3019.11	1625931.26	331356.36	39°24'07.927"N	80°49'25.658"W	5560.63	147.116	3.89	-0.03	-3.89
11859.00	89.880	154.090	6377.65	5509.10	-4749.49	3058.42	1625970.56	331276.52	39°24'07.144"N	80°49'25.142"W	5649.03	147.221	0.69	-0.13	0.67
11949.00	89.970	157.410	6377.77	5598.84	-4831.54	3095.38	1626007.52	331194.48	39°24'06.339"N	80°49'24.656"W	5738.04	147.354	3.69	0.10	3.69



# Actual Wellpath Report

SHR-40B-HS ST01 AWP Proj: 16311'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot B
Area	Tyler County, WV	Well	SHR-40B-HS ST01
Field	Tyler	Wellbore	SHR-40B-HS ST01 AWB
Facility	SHR-40 Pad	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD

## WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
12038.00	89.570	161.360	6378.12	5687.82	-4914.82	3126.71	1626038.85	331111.20	39°24'05.520"N	80°49'24.242"W	5825.10	147.536	4.46	-0.45	4.44
12128.00	89.570	160.710	6378.80	5777.80	-4999.93	3155.95	1626068.09	331026.09	39°24'04.683"N	80°49'23.853"W	5912.65	147.740	0.72	0.00	-0.72
12217.00	89.540	159.930	6379.49	5866.79	-5083.73	3185.93	1626098.06	330942.30	39°24'03.860"N	80°49'23.456"W	5999.54	147.925	0.88	-0.03	-0.88
12307.00	89.940	164.240	6379.90	5956.71	-5169.35	3213.60	1626125.74	330856.69	39°24'03.017"N	80°49'23.087"W	6086.82	148.132	4.81	0.44	4.79
12397.00	89.940	165.190	6379.99	6046.41	-5256.16	3237.33	1626149.46	330769.88	39°24'02.163"N	80°49'22.769"W	6173.13	148.371	1.06	0.00	1.06
12486.00	89.850	164.180	6380.16	6135.11	-5342.00	3260.84	1626172.97	330684.04	39°24'01.318"N	80°49'22.453"W	6258.59	148.599	1.14	-0.10	-1.13
12576.00	89.750	161.240	6380.47	6225.00	-5427.92	3287.58	1626199.71	330598.12	39°24'00.473"N	80°49'22.096"W	6345.91	148.798	3.27	-0.11	-3.27
12666.00	90.250	160.920	6380.47	6314.98	-5513.06	3316.76	1626228.89	330512.99	39°23'59.636"N	80°49'21.709"W	6433.87	148.968	0.66	0.56	-0.36
12755.00	90.120	161.240	6380.18	6403.96	-5597.25	3345.62	1626257.75	330428.80	39°23'58.808"N	80°49'21.325"W	6520.92	149.132	0.39	-0.15	0.36
12845.00	90.250	161.990	6379.89	6493.93	-5682.66	3374.01	1626286.13	330343.40	39°23'57.968"N	80°49'20.948"W	6608.82	149.301	0.85	0.14	0.83
12934.00	90.120	156.970	6379.61	6582.90	-5765.98	3405.19	1626317.32	330260.08	39°23'57.149"N	80°49'20.535"W	6696.41	149.435	5.64	-0.15	-5.64
13024.00	90.150	155.230	6379.39	6672.68	-5848.26	3441.66	1626353.78	330177.81	39°23'56.341"N	80°49'20.055"W	6785.80	149.524	1.93	0.03	-1.93
13114.00	89.780	153.240	6379.45	6762.22	-5929.31	3480.77	1626392.90	330096.76	39°23'55.546"N	80°49'19.542"W	6875.50	149.585	2.25	-0.41	-2.21
13203.00	89.780	157.700	6379.79	6850.92	-6010.26	3517.72	1626429.83	330015.82	39°23'54.751"N	80°49'19.056"W	6964.01	149.660	5.01	0.00	5.01
13293.00	90.090	163.500	6379.89	6940.88	-6095.11	3547.60	1626469.71	329930.97	39°23'53.917"N	80°49'18.659"W	7052.36	149.799	6.45	0.34	6.44
13382.00	89.690	163.600	6380.06	7029.71	-6180.47	3572.80	1626484.92	329845.62	39°23'53.077"N	80°49'18.322"W	7138.84	149.969	0.46	-0.45	0.11
13472.00	90.220	161.950	6380.13	7119.60	-6266.43	3599.45	1626511.56	329759.67	39°23'52.232"N	80°49'17.967"W	7226.63	150.127	1.93	0.59	-1.83
13562.00	90.280	159.410	6379.74	7209.58	-6351.35	3629.22	1626541.34	329674.75	39°23'51.397"N	80°49'17.572"W	7315.11	150.256	2.82	0.07	-2.82
13651.00	90.180	158.000	6379.38	7298.56	-6434.27	3661.54	1626573.65	329591.83	39°23'50.582"N	80°49'17.144"W	7403.16	150.357	1.59	-0.11	-1.58
13740.00	90.370	158.940	6378.96	7387.52	-6517.06	3694.21	1626606.31	329509.05	39°23'49.769"N	80°49'16.713"W	7491.28	150.453	1.08	0.21	1.06
13830.00	90.460	162.450	6378.30	7477.50	-6601.98	3723.95	1626636.06	329424.13	39°23'48.934"N	80°49'16.318"W	7579.84	150.574	3.90	0.10	3.90
13919.00	90.430	163.010	6377.61	7566.40	-6686.97	3750.37	1626662.48	329339.15	39°23'48.098"N	80°49'15.966"W	7666.87	150.714	0.63	-0.03	0.63
14009.00	90.180	160.600	6377.13	7656.34	-6772.46	3778.48	1626690.58	329253.66	39°23'47.257"N	80°49'15.592"W	7755.20	150.842	2.69	-0.28	-2.68
14099.00	90.180	161.300	6376.85	7746.33	-6857.53	3807.85	1626719.95	329168.59	39°23'46.420"N	80°49'15.202"W	7843.81	150.957	0.78	0.00	0.78
14189.00	90.220	162.400	6376.54	7836.28	-6943.05	3835.89	1626747.99	329083.08	39°23'45.579"N	80°49'14.829"W	7932.21	151.080	1.22	0.04	1.22
14278.00	90.250	159.920	6376.17	7925.26	-7027.27	3864.62	1626776.72	328998.86	39°23'44.751"N	80°49'14.447"W	8019.84	151.192	2.79	0.03	-2.79
14367.00	90.310	157.220	6375.74	8014.22	-7110.11	3897.14	1626809.23	328916.03	39°23'43.937"N	80°49'14.017"W	8108.11	151.272	3.03	0.07	-3.03
14457.00	90.180	158.850	6375.35	8104.16	-7193.58	3930.80	1626842.89	328832.57	39°23'43.117"N	80°49'13.573"W	8197.48	151.346	1.82	-0.14	1.81
14547.00	90.180	159.490	6375.07	8194.15	-7277.69	3962.80	1626874.90	328748.45	39°23'42.291"N	80°49'13.150"W	8286.65	151.431	0.71	0.00	0.71
14636.00	90.340	159.450	6374.67	8283.15	-7361.04	3994.01	1626906.11	328665.11	39°23'41.472"N	80°49'12.736"W	8374.79	151.516	0.19	0.18	-0.04



# Actual Wellpath Report

SHR-40B-HS ST01 AWP Proj: 16311'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot B
Area	Tyler County, WV	Well	SHR-40B-HS ST01
Field	Tyler	Wellbore	SHR-40B-HS ST01 AWB
Facility	SHR-40 Pad	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD

## WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
14726.00	90.310	159.590	6374.16	8373.14	-7445.35	4025.50	1626937.59	328580.81	39°23'40.643"N	80°49'12.320"W	8463.92	151.601	0.16	-0.03	0.16
14816.00	90.280	160.360	6373.69	8463.14	-7529.91	4056.32	1626968.41	328496.25	39°23'39.812"N	80°49'11.911"W	8552.97	151.689	0.86	-0.03	0.86
14905.00	90.220	160.110	6373.30	8552.14	-7613.66	4086.42	1626998.50	328412.50	39°23'38.988"N	80°49'11.512"W	8640.99	151.777	0.29	-0.07	-0.28
14995.00	89.970	157.510	6373.15	8642.11	-7697.57	4118.95	1627031.03	328328.60	39°23'38.164"N	80°49'11.082"W	8730.31	151.849	2.90	-0.28	-2.89
15085.00	90.060	155.860	6373.13	8731.96	-7780.22	4154.57	1627066.65	328245.96	39°23'37.352"N	80°49'10.613"W	8819.99	151.898	1.84	0.10	-1.83
15174.00	89.850	153.020	6373.20	8820.53	-7860.50	4192.96	1627105.04	328165.68	39°23'36.565"N	80°49'10.109"W	8908.89	151.924	3.20	-0.24	-3.19
15264.00	89.850	158.470	6373.44	8910.25	-7942.52	4229.92	1627142.00	328083.66	39°23'35.759"N	80°49'09.623"W	8998.66	151.962	6.06	0.00	6.06
15353.00	89.910	161.660	6373.62	8999.24	-8026.18	4260.26	1627172.34	328000.01	39°23'34.937"N	80°49'09.221"W	9086.77	152.041	3.58	0.07	3.58
15443.00	89.910	163.460	6373.76	9089.14	-8112.04	4287.23	1627199.31	327914.15	39°23'34.092"N	80°49'08.861"W	9175.27	152.143	2.00	0.00	2.00
15533.00	90.090	160.790	6373.76	9179.07	-8197.69	4314.85	1627226.93	327828.51	39°23'33.250"N	80°49'08.494"W	9263.91	152.240	2.97	0.20	-2.97
15622.00	90.280	156.230	6373.48	9268.02	-8280.48	4347.45	1627259.52	327745.72	39°23'32.437"N	80°49'08.063"W	9352.36	152.299	5.13	0.21	-5.12
15712.00	90.280	161.020	6373.04	9357.97	-8364.26	4380.24	1627292.31	327661.94	39°23'31.613"N	80°49'07.630"W	9441.79	152.360	5.32	0.00	5.32
15801.00	90.310	165.040	6372.58	9446.82	-8449.37	4406.21	1627318.28	327576.84	39°23'30.776"N	80°49'07.283"W	9529.25	152.459	4.52	0.03	4.52
15891.00	90.340	163.740	6372.07	9536.55	-8536.04	4430.43	1627342.50	327490.17	39°23'29.923"N	80°49'06.958"W	9617.32	152.570	1.44	0.03	-1.44
15980.00	90.030	159.120	6371.78	9625.50	-8620.39	4458.77	1627370.83	327405.83	39°23'29.094"N	80°49'06.582"W	9705.24	152.650	5.20	-0.35	-5.19
16070.00	89.880	159.670	6371.85	9715.50	-8704.63	4490.44	1627402.50	327321.60	39°23'28.266"N	80°49'06.163"W	9794.62	152.712	0.63	-0.17	0.61
16160.00	90.030	159.410	6371.92	9805.49	-8788.95	4521.90	1627433.96	327237.28	39°23'27.437"N	80°49'05.746"W	9883.99	152.774	0.33	0.17	-0.29
16249.00	90.060	159.860	6371.85	9894.49	-8872.39	4552.87	1627464.93	327153.85	39°23'26.617"N	80°49'05.336"W	9972.36	152.835	0.51	0.03	0.51
16286.00	89.880	160.670	6371.87	9931.49	-8907.21	4565.36	1627477.42	327119.02	39°23'26.275"N	80°49'05.171"W	10009.05	152.863	2.24	-0.49	2.19
16311.00	89.880	160.670	6371.92	9956.49	-8930.81	4573.64	1627485.70	327095.43	39°23'26.043"N	80°49'05.061"W	10033.82	152.882	0.00	0.00	0.00



# Actual Wellpath Report

SHR-40B-HS ST01 AWP Proj: 16311'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot B
Area	Tyler County, WV	Well	SHR-40B-HS ST01
Field	Tyler	Wellbore	SHR-40B-HS ST01 AWB
Facility	SHR-40 Pad	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SHR-40B-HS BHL Rev-3		6373.86	-8931.97	4569.64	1627481.70	327094.27	39°23'26.031"N	80°49'05.112"W	point
SHR-40B-HS LP Plat		6376.90	-232.30	1403.23	1624315.46	335793.46	39°24'51.543"N	80°49'47.077"W	point
SHR-40B-HS LP Rev-3		6390.00	-239.81	1405.96	1624318.19	335785.95	39°24'51.470"N	80°49'47.041"W	point
SHR-40 Pad LL		6599.40	16.71	10.28	1622922.59	336042.46	39°24'53.800"N	80°50'04.870"W	polygon

## WELLPATH COMPOSITION - Ref Wellbore: SHR-40B-HS ST01 AWB Ref Wellpath: SHR-40B-HS ST01 AWP Proj: 16311'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
19.40	3629.00	Generic gyro - northseeking (Standard)	01_MS Gyro <8-3/4"> (100'-3625')	SHR-40B-HS AWB
3629.00	5364.00	ISCW/SA MWD, Rev. 2 (Standard)	02_SDI MWD <8-3/4"> (3625')(3680'-5980')	SHR-40B-HS AWB
5364.00	16286.00	NaviTrak (AT Curve Short Spaced)	03_BHI AT Curve <8-3/4"> (5364')(5372'-16286')	SHR-40B-HS ST01 AWB
16286.00	16311.00	Blind Drilling (std)	Projection to bit	SHR-40B-HS ST01 AWB



# Actual Wellpath Report

SHR-40B-HS ST01 AWP Proj: 16311'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot B
Area	Tyler County, WV	Well	SHR-40B-HS ST01
Field	Tyler	Wellbore	SHR-40B-HS ST01 AWB
Facility	SHR-40 Pad	Sidetrack from	SHR-40B-HS AWB at 5452.00 MD

## COMMENTS

### Wellpath general comments

API: 47-095-02204-0100  
 BHI Job #: 7278210  
 Rig: Precision 542  
 Duration: 6/3/2015-6/8/2015  
 MS Gyro <8-3/4"> (100'-3625')  
 SDI MWD <8-3/4"> (3625')(3680'-5980')  
 BHI AT Curve <8-3/4"> (5364')(5372'-16286')  
 Projected MD at TD: 16311'

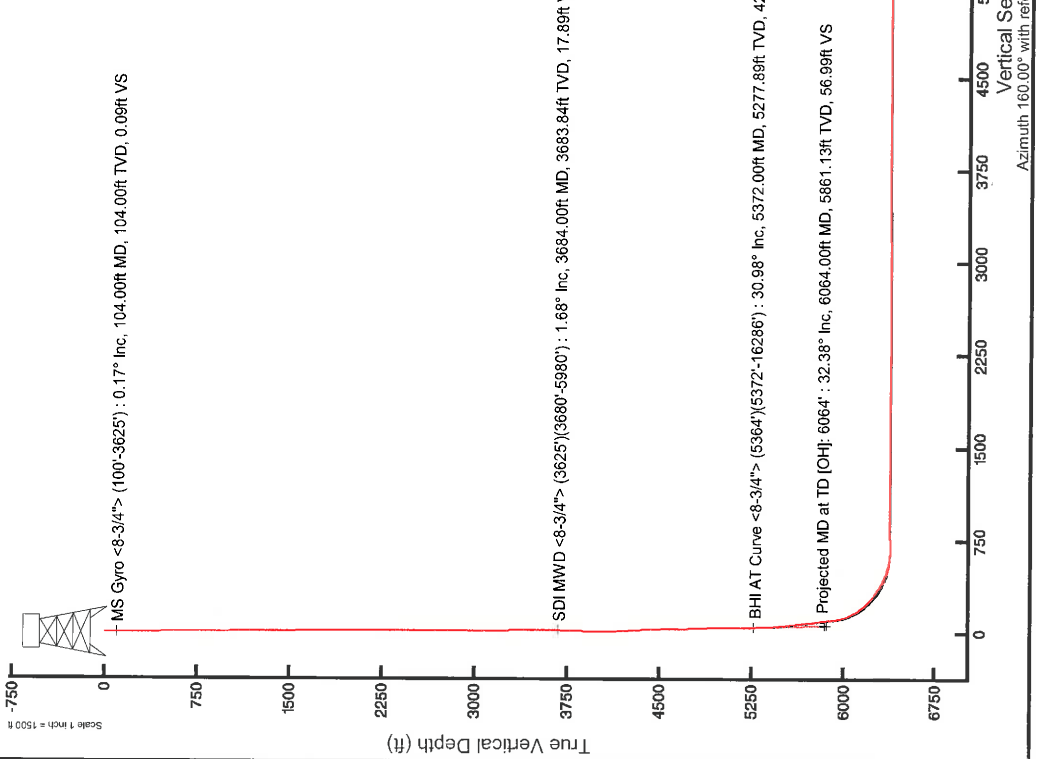


# NOBLE ENERGY

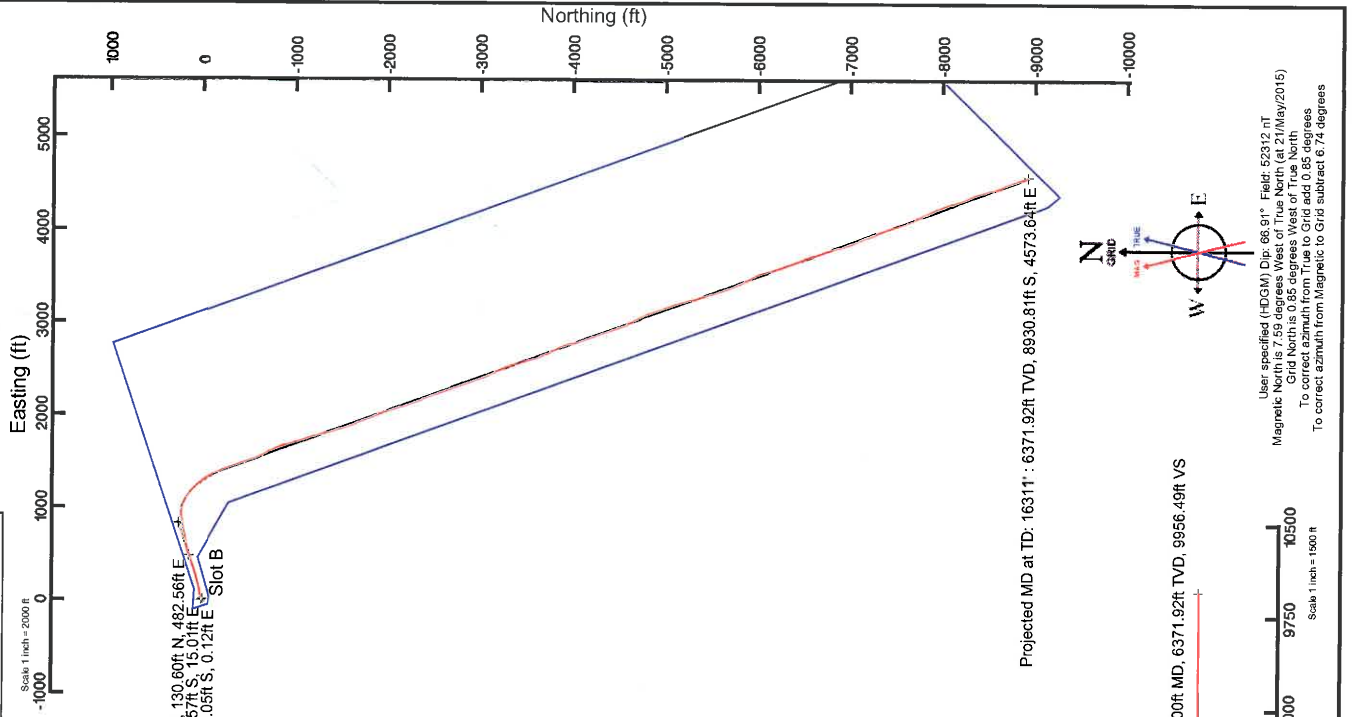
Location: Tyler County, WV  
Slot: Slot B  
Field: SHR-40B-HS ST01  
Well: SHR-40B-HS ST01 PWB  
Facility: SHR-40 Pad



Grid System: NAD83 / Lambert West Virginia SP, Northern Zone (6701) US feet			
North Reference: Grid North			
Scale: True distance			
Distances are in feet			
Coordinates are in feet referenced to Slot			
Created by: odayane on 11/06/2015			
Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
SHR-40 Pad	1522922.599	336042.458	80°50'04.670"W
Slot	Local E (ft)	Local N (ft)	Local L (ft)
Slot B	-16.71	-10.28	1622912.310
Comment:	Renamed well - 8/19/14		
Precision 542 (RKB) to Mud line (At Slot: Slot B)	19.4ft		
Mean Sea Level to Mud line (At Slot: Slot B)	-765.5ft		
Precision 542 (RKB) to Mean Sea Level	788.9ft		



API: 47-095-02204-0100  
BHI Job #: 7278210  
Rig: Precision 542  
Duration: 6/3/2015-6/8/2015



User specified (HDGM) Dip: 66.91° Field: 52312 HT  
Magnetic North is 7.55 degrees West of True North (at 27/May/2015)  
To correct azimuth from True to Grid add 0.85 degrees  
To correct azimuth from Magnetic to Grid subtract 6.74 degrees

