

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	HURLEY H35-746
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.26-T03N-R65W	Wellbore	HURLEY H35-746 AWB
Slot	SLOT#47 HURLEY H35-746 (2084'FNL&1065'FEL,SEC.26)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Manajohj
Scale	0.999957	Report Generated	1/20/2020 at 1:19:59 PM
Convergence at slot	0.57° East	Database	WA_NOBLE

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	287.16	2905.41	3244419.39	1316110.60	40°11'52.1160"N	104°37'30.0000"W
Facility Reference Pt			3241514.12	1315823.44	40°11'49.5600"N	104°38'7.4760"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.3150"N	105°30'0.0000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 517 (4854'GL+30'KB@4884') (RKB) to Facility Vertical Datum	4884.00ft
Horizontal Reference Pt	Slot	H&P 517 (4854'GL+30'KB@4884') (RKB) to Mean Sea Level	4884.00ft
Vertical Reference Pt	H&P 517 (4854'GL+30'KB@4884') (RKB)	H&P 517 (4854'GL+30'KB@4884') (RKB) to Ground Level at Slot (SLOT#47 HURLEY H35-746 (2084'FNL&1065'FEL,SEC.26))	4884.00ft
MD Reference Pt	H&P 517 (4854'GL+30'KB@4884') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	189.57°

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WELLPATH DATA (163 stations)														
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	TVDSS [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Tooface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
0.00	0.000	213.840	0.00	-4884.00	0.00	0.00	0.00	40°11'52.1160"N	104°37'30.0000"W	0.00	0.00	0.00	0.00	
80.00	0.280	213.840	80.00	-4804.00	0.18	-0.16	-0.11	40°11'52.1144"N	104°37'30.0014"W	0.35	-140.89	0.35	0.00	3RD PARTY FIRST GYRO SURVEY
174.00	0.190	184.580	174.00	-4710.00	0.54	-0.51	-0.25	40°11'52.1110"N	104°37'30.0033"W	0.16	178.49	-0.10	-31.13	
266.00	0.340	2.220	266.00	-4618.00	0.42	-0.39	-0.25	40°11'52.1122"N	104°37'30.0033"W	0.58	-135.70	0.16	193.09	
361.00	0.290	281.480	361.00	-4523.00	0.14	-0.06	-0.48	40°11'52.1155"N	104°37'30.0061"W	0.43	-148.76	-0.05	-84.99	
455.00	0.290	163.960	455.00	-4429.00	0.34	-0.24	-0.64	40°11'52.1137"N	104°37'30.0083"W	0.53	167.31	0.00	-125.02	
550.00	0.400	322.100	550.00	-4334.00	0.34	-0.21	-0.78	40°11'52.1140"N	104°37'30.0101"W	0.71	172.22	0.12	166.46	
644.00	0.060	69.790	644.00	-4240.00	0.09	0.07	-0.94	40°11'52.1168"N	104°37'30.0120"W	0.45	16.82	-0.36	114.56	
739.00	0.300	83.290	739.00	-4145.01	0.00	0.11	-0.64	40°11'52.1172"N	104°37'30.0083"W	0.25	-72.58	0.25	14.21	
834.00	0.340	68.050	833.99	-4050.01	-0.22	0.25	-0.13	40°11'52.1185"N	104°37'30.0017"W	0.10	-61.30	0.04	-16.04	
928.00	0.490	44.240	927.99	-3956.01	-0.70	0.64	0.41	40°11'52.1223"N	104°37'29.9947"W	0.24	-129.28	0.16	-25.33	
1023.00	0.380	1.480	1022.99	-3861.01	-1.34	1.25	0.70	40°11'52.1282"N	104°37'29.9909"W	0.35	-146.54	-0.12	-45.01	
1118.00	0.210	308.930	1117.99	-3766.01	-1.74	1.67	0.57	40°11'52.1324"N	104°37'29.9924"W	0.32	-142.95	-0.18	-85.32	
1213.00	0.140	230.640	1212.99	-3671.01	-1.74	1.71	0.34	40°11'52.1328"N	104°37'29.9953"W	0.24	-26.24	-0.07	-82.41	
1307.00	0.330	215.210	1306.99	-3577.01	-1.41	1.41	0.10	40°11'52.1299"N	104°37'29.9985"W	0.21	31.79	0.20	-16.41	
1402.00	0.490	226.220	1401.98	-3482.02	-0.84	0.91	-0.35	40°11'52.1250"N	104°37'30.0044"W	0.19	138.77	0.17	11.59	
1496.00	0.370	245.780	1495.98	-3388.02	-0.35	0.50	-0.92	40°11'52.1211"N	104°37'30.0118"W	0.20	151.24	-0.13	20.81	
1591.00	0.180	298.470	1590.98	-3293.02	-0.22	0.45	-1.33	40°11'52.1206"N	104°37'30.0171"W	0.31	-31.49	-0.20	55.46	
1686.00	0.370	281.700	1685.98	-3198.02	-0.28	0.58	-1.76	40°11'52.1219"N	104°37'30.0226"W	0.22	103.02	0.20	-17.65	
1780.00	0.370	307.730	1779.98	-3104.02	-0.44	0.83	-2.30	40°11'52.1244"N	104°37'30.0295"W	0.18	21.80	0.00	27.69	
1875.00	0.500	313.580	1874.97	-3009.03	-0.81	1.30	-2.84	40°11'52.1292"N	104°37'30.0364"W	0.14	12.60	0.14	6.16	
1920.00	0.680	316.950	1919.97	-2964.03	-1.09	1.63	-3.17	40°11'52.1325"N	104°37'30.0406"W	0.41	114.74	0.40	7.49	TIE ON TO 3RD PARTY GYRO SURVEY
2002.00	0.620	336.630	2001.97	-2882.03	-1.75	2.40	-3.67	40°11'52.1400"N	104°37'30.0470"W	0.28	178.16	-0.07	24.00	FIRST BH MWD SURVEY
2097.00	0.040	4.570	2096.96	-2787.04	-2.22	2.90	-3.87	40°11'52.1451"N	104°37'30.0496"W	0.62	-97.09	-0.61	29.41	
2191.00	0.070	302.030	2190.96	-2693.04	-2.27	2.97	-3.92	40°11'52.1457"N	104°37'30.0501"W	0.07	-58.71	0.03	-66.53	
2286.00	1.040	246.620	2285.96	-2598.04	-1.83	2.65	-4.76	40°11'52.1427"N	104°37'30.0610"W	1.05	13.57	1.02	-58.33	
2381.00	3.200	255.820	2380.89	-2503.11	-0.29	1.66	-8.12	40°11'52.1332"N	104°37'30.1045"W	2.29	35.01	2.27	9.68	
2475.00	5.670	271.960	2474.60	-2409.40	1.38	1.18	-15.31	40°11'52.1291"N	104°37'30.1971"W	2.92	-35.12	2.63	17.17	
2570.00	6.870	265.170	2569.03	-2314.97	3.42	0.86	-25.66	40°11'52.1270"N	104°37'30.3306"W	1.48	-23.44	1.26	-7.15	
2665.00	8.910	259.570	2663.13	-2220.87	7.35	-0.95	-38.56	40°11'52.1104"N	104°37'30.4970"W	2.29	-0.10	2.15	-5.89	
2759.00	11.180	259.550	2755.69	-2128.31	12.96	-3.92	-54.68	40°11'52.0826"N	104°37'30.7052"W	2.41	-6.31	2.41	-0.02	
2854.00	13.160	258.590	2848.55	-2035.45	19.98	-7.73	-74.34	40°11'52.0469"N	104°37'30.9590"W	2.09	0.70	2.08	-1.01	
2948.00	15.090	258.680	2939.70	-1944.30	28.17	-12.25	-96.83	40°11'52.0044"N	104°37'31.2494"W	2.05	-13.39	2.05	0.10	
3043.00	16.700	257.350	3031.06	-1852.94	37.75	-17.67	-122.28	40°11'51.9533"N	104°37'31.5780"W	1.74	-179.44	1.69	-1.40	
3138.00	16.410	257.340	3122.13	-1761.87	47.98	-23.60	-148.69	40°11'51.8973"N	104°37'31.9190"W	0.31	-45.54	-0.31	-0.01	
3232.00	16.750	256.150	3212.22	-1671.78	58.39	-29.75	-174.80	40°11'51.8391"N	104°37'32.2562"W	0.51	130.35	0.36	-1.27	
3327.00	16.070	259.130	3303.35	-1580.65	68.42	-35.51	-201.00	40°11'51.7847"N	104°37'32.5947"W	1.14	-23.61	-0.72	3.14	
3421.00	16.230	258.880	3393.64	-1490.36	77.61	-40.49	-226.67	40°11'51.7380"N	104°37'32.9260"W	0.19	-55.31	0.17	-0.27	
3516.00	16.510	257.480	3484.79	-1399.21	87.37	-45.98	-252.87	40°11'51.6863"N	104°37'33.2644"W	0.51	157.69	0.29	-1.47	
3611.00	13.920	261.970	3576.45	-1307.55	95.90	-50.50	-277.37	40°11'51.6440"N	104°37'33.5807"W	2.99	35.90	-2.73	4.73	
3706.00	16.650	268.610	3668.09	-1215.91	101.95	-52.43	-302.30	40°11'51.6274"N	104°37'33.9021"W	3.41	-75.74	2.87	6.99	
3801.00	17.220	262.320	3758.98	-1125.02	108.70	-54.64	-329.84	40°11'51.6082"N	104°37'34.2574"W	2.02	-93.45	0.60	-6.62	
3895.00	17.200	256.480	3848.78	-1035.22	118.28	-59.75	-357.15	40°11'51.5604"N	104°37'34.6099"W	1.84	-31.53	-0.02	-6.21	
3990.00	17.520	255.830	3939.45	-944.55	129.55	-66.53	-384.67	40°11'51.4960"N	104°37'34.9654"W	0.39	9.70	0.34	-0.68	
4085.00	17.680	255.920	4030.00	-854.00	141.09	-73.54	-412.52	40°11'51.4295"N	104°37'35.3252"W	0.17	-169.73	0.17	0.09	

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Facility	SEC.26-T03N-R65W	Wellbore	HURLEY H35-746 AWB
Slot	SLOT#47 HURLEY H35-746 (2084'FNL&1065'FEL,SEC.26)		

WELLPATH DATA (163 stations)														
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	TVDSS [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Tooface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
4180.00	17.580	255.860	4120.54	-763.46	152.64	-80.56	-440.43	40°11'51.3629"N	104°37'35.6857"W	0.11	40.96	-0.11	-0.06	
4274.00	17.710	256.230	4210.12	-673.88	164.01	-87.43	-468.08	40°11'51.2977"N	104°37'36.0429"W	0.18	-22.80	0.14	0.39	
4369.00	18.240	255.520	4300.48	-583.52	175.80	-94.59	-496.51	40°11'51.2297"N	104°37'36.4102"W	0.60	131.31	0.56	-0.75	
4463.00	18.080	256.110	4389.80	-494.20	187.60	-101.77	-524.91	40°11'51.1615"N	104°37'36.7771"W	0.26	110.40	-0.17	0.63	
4558.00	18.040	256.460	4480.12	-403.88	199.24	-108.75	-553.52	40°11'51.0953"N	104°37'37.1467"W	0.12	-94.32	-0.04	0.37	
4653.00	18.030	256.010	4570.45	-313.55	210.89	-115.75	-582.09	40°11'51.0289"N	104°37'37.5157"W	0.15	-51.20	-0.01	-0.47	
4747.00	18.080	255.810	4659.82	-224.18	222.58	-122.84	-610.35	40°11'50.9616"N	104°37'37.8807"W	0.08	136.88	0.05	-0.21	
4842.00	17.760	256.800	4750.21	-133.79	234.12	-129.76	-638.75	40°11'50.8960"N	104°37'38.2475"W	0.47	-103.04	-0.34	1.04	
4937.00	17.700	255.920	4840.70	-43.30	245.52	-136.58	-666.86	40°11'50.8313"N	104°37'38.6107"W	0.29	-26.43	-0.06	-0.93	
5032.00	17.980	255.470	4931.13	47.13	257.30	-143.78	-695.06	40°11'50.7630"N	104°37'38.9750"W	0.33	106.71	0.29	-0.47	
5127.00	17.880	256.590	5021.52	137.52	268.98	-150.84	-723.44	40°11'50.6959"N	104°37'39.3416"W	0.38	-57.72	-0.11	1.18	
5221.00	18.010	255.930	5110.95	226.95	280.44	-157.72	-751.57	40°11'50.6307"N	104°37'39.7050"W	0.26	116.22	0.14	-0.70	
5316.00	17.790	257.430	5201.35	317.35	291.80	-164.44	-779.98	40°11'50.5670"N	104°37'40.0719"W	0.54	122.48	-0.23	1.58	
5410.00	15.830	271.380	5291.37	407.37	299.04	-167.26	-806.83	40°11'50.5417"N	104°37'40.4182"W	4.76	11.42	-2.09	14.84	
5505.00	18.010	272.800	5382.25	498.25	302.62	-166.23	-834.46	40°11'50.5546"N	104°37'40.7741"W	2.34	-96.71	2.29	1.49	
5600.00	18.080	256.980	5472.63	588.63	310.02	-168.84	-863.50	40°11'50.5317"N	104°37'41.1487"W	5.14	146.31	0.07	-16.65	
5695.00	17.370	258.580	5563.12	679.12	320.76	-174.97	-891.77	40°11'50.4739"N	104°37'41.5137"W	0.91	-80.70	-0.75	1.68	
5789.00	18.030	249.610	5652.69	768.69	333.05	-182.81	-919.16	40°11'50.3990"N	104°37'41.8677"W	2.98	156.88	0.70	-9.54	
5884.00	17.510	250.350	5743.15	859.15	347.37	-192.74	-946.40	40°11'50.3035"N	104°37'42.2200"W	0.60	-38.04	-0.55	0.78	
5979.00	17.930	249.290	5833.65	949.65	361.72	-202.72	-973.54	40°11'50.2076"N	104°37'42.5710"W	0.56	-17.14	0.44	-1.12	
6073.00	17.960	249.260	5923.07	1039.07	376.32	-212.97	-1000.63	40°11'50.1089"N	104°37'42.9213"W	0.03	94.99	0.03	-0.03	
6168.00	17.900	252.490	6013.46	1129.46	390.36	-222.55	-1028.25	40°11'50.0169"N	104°37'43.2785"W	1.05	-132.22	-0.06	3.40	
6262.00	17.700	251.760	6102.96	1218.96	403.60	-231.37	-1055.60	40°11'49.9324"N	104°37'43.6320"W	0.32	-114.93	-0.21	-0.78	
6357.00	17.500	250.290	6193.52	1309.52	417.33	-240.71	-1082.76	40°11'49.8428"N	104°37'43.9832"W	0.51	-83.37	-0.21	-1.55	
6452.00	17.520	249.740	6284.12	1400.12	431.42	-250.47	-1109.62	40°11'49.7489"N	104°37'44.3306"W	0.18	131.09	0.02	-0.58	
6547.00	15.790	257.650	6375.14	1491.14	443.36	-258.19	-1135.67	40°11'49.6752"N	104°37'44.6672"W	3.00	39.83	-1.82	8.33	
6641.00	16.870	260.690	6465.35	1581.35	452.55	-263.13	-1161.62	40°11'49.6288"N	104°37'45.0023"W	1.46	-67.14	1.15	3.23	
6736.00	19.620	245.590	6555.61	1671.61	465.94	-271.96	-1189.77	40°11'49.5443"N	104°37'45.3661"W	5.73	-63.13	2.89	-15.89	
6831.00	25.870	224.210	6643.33	1759.33	491.97	-293.47	-1218.82	40°11'49.3347"N	104°37'45.7432"W	10.81	-44.12	6.58	-22.51	
6925.00	32.820	212.730	6725.28	1841.28	532.34	-329.67	-1246.95	40°11'48.9796"N	104°37'46.1103"W	9.48	-14.96	7.39	-12.21	
7020.00	40.260	209.680	6801.56	1917.56	584.92	-378.07	-1276.12	40°11'48.5042"N	104°37'46.4922"W	8.06	-26.98	7.83	-3.21	
7114.00	47.790	204.600	6869.12	1985.12	647.17	-436.21	-1305.70	40°11'47.9325"N	104°37'46.8808"W	8.84	-43.61	8.01	-5.40	
7209.00	55.750	195.850	6927.94	2043.94	720.38	-506.17	-1331.14	40°11'47.2437"N	104°37'47.2174"W	11.06	-43.53	8.38	-9.21	
7303.00	63.680	187.750	6975.36	2091.36	801.33	-585.51	-1347.48	40°11'46.4613"N	104°37'47.4380"W	11.24	-27.22	8.44	-8.62	
7398.00	72.580	183.010	7010.73	2126.73	889.13	-673.17	-1355.62	40°11'45.5958"N	104°37'47.5540"W	10.45	-23.65	9.37	-4.99	
7493.00	80.820	179.380	7032.57	2148.57	980.50	-765.51	-1357.50	40°11'44.6836"N	104°37'47.5899"W	9.44	-8.33	8.67	-3.82	
7587.00	90.430	177.980	7039.74	2155.74	1072.42	-859.10	-1355.33	40°11'43.7586"N	104°37'47.5738"W	10.33	160.77	10.22	-1.49	
7682.00	90.000	178.130	7039.38	2155.38	1165.51	-954.04	-1352.11	40°11'42.8201"N	104°37'47.5443"W	0.48	-96.06	-0.45	0.16	
7777.00	89.880	177.000	7039.48	2155.48	1258.43	-1048.96	-1348.07	40°11'41.8818"N	104°37'47.5043"W	1.20	101.84	-0.13	-1.19	
7871.00	89.660	178.050	7039.86	2155.86	1350.36	-1142.87	-1344.01	40°11'40.9535"N	104°37'47.4638"W	1.14	75.24	-0.23	1.12	
7966.00	90.000	179.340	7040.14	2156.14	1443.65	-1237.84	-1341.85	40°11'40.0148"N	104°37'47.4480"W	1.40	90.00	0.36	1.36	
8061.00	90.000	179.580	7040.14	2156.14	1537.18	-1332.83	-1340.95	40°11'39.0760"N	104°37'47.4484"W	0.25	82.57	0.00	0.25	
8155.00	90.030	179.810	7040.11	2156.11	1629.79	-1426.83	-1340.45	40°11'38.1471"N	104°37'47.4539"W	0.25	120.96	0.03	0.24	
8250.00	89.820	180.160	7040.24	2156.24	1723.46	-1521.83	-1340.43	40°11'37.2083"N	104°37'47.4656"W	0.43	95.20	-0.22	0.37	
8345.00	89.780	180.600	7040.57	2156.57	1817.24	-1616.83	-1341.06	40°11'36.2697"N	104°37'47.4857"W	0.47	-103.00	-0.04	0.46	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	HURLEY H35-746
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.26-T03N-R65W	Wellbore	HURLEY H35-746 AWB
Slot	SLOT#47 HURLEY H35-746 (2084'FNL&1065'FEL,SEC.26)		

WELLPATH DATA (163 stations)														
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	TVDSS [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Tooface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
8440.00	89.720	180.340	7040.98	2156.98	1911.05	-1711.83	-1341.84	40°11'35.3311"N	104°37'47.5078"W	0.28	68.29	-0.06	-0.27	
8534.00	90.150	181.420	7041.09	2157.09	2003.97	-1805.81	-1343.28	40°11'34.4025"N	104°37'47.5382"W	1.24	-107.27	0.46	1.15	
8629.00	89.780	180.230	7041.15	2157.15	2097.86	-1900.80	-1344.65	40°11'33.4640"N	104°37'47.5679"W	1.31	3.58	-0.39	-1.25	
8724.00	89.940	180.240	7041.38	2157.38	2191.60	-1995.80	-1345.04	40°11'32.5253"N	104°37'47.5849"W	0.17	128.48	0.17	0.01	
8819.00	89.630	180.630	7041.74	2157.74	2285.40	-2090.80	-1345.76	40°11'31.5866"N	104°37'47.6062"W	0.52	-34.22	-0.33	0.41	
8914.00	89.880	180.460	7042.14	2158.14	2379.22	-2185.79	-1346.66	40°11'30.6480"N	104°37'47.6299"W	0.32	-70.41	0.26	-0.18	
9008.00	90.090	179.870	7042.17	2158.17	2471.96	-2279.79	-1346.93	40°11'29.7192"N	104°37'47.6452"W	0.67	81.20	0.22	-0.63	
9103.00	90.220	180.710	7041.91	2157.91	2565.71	-2374.79	-1347.41	40°11'28.7805"N	104°37'47.6634"W	0.89	-106.76	0.14	0.88	
9198.00	89.940	179.780	7041.78	2157.78	2659.46	-2469.79	-1347.82	40°11'27.8418"N	104°37'47.6807"W	1.02	49.39	-0.29	-0.98	
9293.00	91.140	181.180	7040.88	2156.88	2753.26	-2564.77	-1348.62	40°11'26.9033"N	104°37'47.7030"W	1.94	-170.11	1.26	1.47	
9387.00	90.280	181.030	7039.72	2155.72	2846.22	-2658.75	-1350.43	40°11'25.9749"N	104°37'47.7382"W	0.93	169.70	-0.91	-0.16	
9482.00	90.060	181.070	7039.44	2155.44	2940.18	-2753.73	-1352.17	40°11'25.0364"N	104°37'47.7726"W	0.24	-76.97	-0.23	0.04	
9577.00	90.370	179.730	7039.08	2155.08	3033.96	-2848.73	-1352.83	40°11'24.0978"N	104°37'47.7932"W	1.45	-90.00	0.33	-1.41	
9671.00	90.370	179.340	7038.47	2154.47	3126.52	-2942.72	-1352.07	40°11'23.1689"N	104°37'47.7952"W	0.41	128.16	0.00	-0.41	
9766.00	89.820	180.040	7038.31	2154.31	3220.11	-3037.72	-1351.56	40°11'22.2302"N	104°37'47.8006"W	0.94	67.14	-0.58	0.74	
9861.00	90.250	181.060	7038.26	2154.26	3313.94	-3132.71	-1352.47	40°11'21.2916"N	104°37'47.8244"W	1.17	-106.06	0.45	1.07	
9955.00	90.060	180.400	7038.00	2154.00	3406.82	-3226.70	-1353.67	40°11'20.3629"N	104°37'47.8517"W	0.73	-114.78	-0.20	-0.70	
10050.00	90.000	180.270	7037.95	2153.95	3500.59	-3321.70	-1354.22	40°11'19.4242"N	104°37'47.8709"W	1.15	100.94	-0.06	-0.14	
10144.00	89.660	182.030	7038.23	2154.23	3593.57	-3415.68	-1356.11	40°11'18.4958"N	104°37'47.9071"W	1.91	-72.07	-0.36	1.87	
10239.00	90.220	180.300	7038.33	2154.33	3687.55	-3510.66	-1358.04	40°11'17.5575"N	104°37'47.9439"W	1.91	167.85	0.59	-1.82	
10334.00	89.570	180.440	7038.51	2154.51	3781.32	-3605.65	-1358.65	40°11'16.6188"N	104°37'47.9639"W	0.70	29.75	-0.68	0.15	
10429.00	90.340	180.880	7038.58	2154.58	3875.18	-3700.65	-1359.75	40°11'15.6802"N	104°37'47.9900"W	0.93	-164.62	0.81	0.46	
10523.00	89.940	180.770	7038.35	2154.35	3968.09	-3794.64	-1361.10	40°11'14.7516"N	104°37'48.0193"W	0.44	-7.13	-0.43	-0.12	
10618.00	90.340	180.720	7038.12	2154.12	4061.96	-3889.63	-1362.34	40°11'13.8131"N	104°37'48.0472"W	0.42	126.18	0.42	-0.05	
10713.00	89.850	181.390	7037.96	2153.96	4155.91	-3984.61	-1364.08	40°11'12.8746"N	104°37'48.0818"W	0.87	42.51	-0.52	0.71	
10807.00	89.970	181.500	7038.11	2154.11	4248.97	-4078.58	-1366.46	40°11'11.9463"N	104°37'48.1242"W	0.17	-90.00	0.13	0.12	
10902.00	89.970	180.360	7038.16	2154.16	4342.89	-4173.57	-1368.00	40°11'11.0079"N	104°37'48.1560"W	1.20	71.57	0.00	-1.20	
10996.00	90.180	180.990	7038.03	2154.03	4435.76	-4267.56	-1369.10	40°11'10.0792"N	104°37'48.1822"W	0.71	-86.63	0.22	0.67	
11091.00	90.250	179.800	7037.68	2153.68	4529.54	-4362.55	-1369.76	40°11'9.1405"N	104°37'48.2026"W	1.25	115.52	0.07	-1.25	
11186.00	89.510	181.350	7037.88	2153.88	4623.37	-4457.55	-1370.71	40°11'8.2020"N	104°37'48.2269"W	1.81	-36.47	-0.78	1.63	
11280.00	89.970	181.010	7038.30	2154.30	4716.36	-4551.52	-1372.65	40°11'7.2735"N	104°37'48.2637"W	0.61	112.19	0.49	-0.36	
11375.00	89.660	181.770	7038.61	2154.61	4810.40	-4646.50	-1374.95	40°11'6.3353"N	104°37'48.3054"W	0.86	-59.22	-0.33	0.80	
11470.00	89.940	181.300	7038.94	2154.94	4904.46	-4741.46	-1377.50	40°11'5.3971"N	104°37'48.3502"W	0.58	-88.27	0.29	-0.49	
11565.00	90.000	179.310	7038.99	2154.99	4998.22	-4836.45	-1378.00	40°11'4.4585"N	104°37'48.3688"W	2.10	122.01	0.06	-2.09	
11659.00	89.600	179.950	7039.32	2155.32	5090.81	-4930.45	-1377.40	40°11'3.5296"N	104°37'48.3728"W	0.80	13.67	-0.43	0.68	
11754.00	90.340	180.130	7039.37	2155.37	5184.50	-5025.45	-1377.46	40°11'2.5909"N	104°37'48.3857"W	0.80	-9.27	0.78	0.19	
11849.00	91.320	179.970	7037.99	2153.99	5278.18	-5120.44	-1377.55	40°11'1.6522"N	104°37'48.3987"W	1.05	-145.33	1.03	-0.17	
11943.00	90.250	179.230	7036.71	2152.71	5370.75	-5214.43	-1376.89	40°11'0.7234"N	104°37'48.4022"W	1.38	94.68	-1.14	-0.79	
12038.00	90.150	180.450	7036.37	2152.37	5464.38	-5309.42	-1376.62	40°10'59.7847"N	104°37'48.4108"W	1.29	93.01	-0.11	1.28	
12132.00	90.120	181.020	7036.15	2152.15	5557.27	-5403.41	-1377.83	40°10'58.8560"N	104°37'48.4382"W	0.61	-49.64	-0.03	0.61	
12227.00	91.080	179.890	7035.16	2151.16	5651.06	-5498.40	-1378.58	40°10'57.9175"N	104°37'48.4599"W	1.56	156.41	1.01	-1.19	
12322.00	90.370	180.200	7033.96	2149.96	5744.74	-5593.40	-1378.66	40°10'56.9788"N	104°37'48.4729"W	0.82	-168.07	-0.75	0.33	
12416.00	89.660	180.050	7033.93	2149.93	5837.47	-5687.39	-1378.86	40°10'56.0500"N	104°37'48.4874"W	0.77	68.88	-0.76	-0.16	
12511.00	90.000	180.930	7034.21	2150.21	5931.28	-5782.39	-1379.68	40°10'55.1114"N	104°37'48.5099"W	0.99	-96.50	0.36	0.93	
12606.00	89.910	180.140	7034.29	2150.29	6025.10	-5877.38	-1380.56	40°10'54.1727"N	104°37'48.5333"W	0.84	29.75	-0.09	-0.83	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	HURLEY H35-746
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.26-T03N-R65W	Wellbore	HURLEY H35-746 AWB
Slot	SLOT#47 HURLEY H35-746 (2084'FNL&1065'FEL,SEC.26)		

WELLPATH DATA (163 stations) † = interpolated, ‡ = extrapolated station														
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	TVDSS [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Tooface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
12700.00	90.120	180.260	7034.26	2150.26	6117.84	-5971.38	-1380.89	40°10'53.2439"N	104°37'48.5494"W	0.26	-21.08	0.22	0.13	
12795.00	90.950	179.940	7033.38	2149.38	6211.54	-6066.38	-1381.06	40°10'52.3052"N	104°37'48.5635"W	0.94	95.90	0.87	-0.34	
12890.00	90.800	181.390	7031.93	2147.93	6305.39	-6161.36	-1382.16	40°10'51.3668"N	104°37'48.5898"W	1.53	-63.01	-0.16	1.53	
12984.00	91.080	180.840	7030.38	2146.38	6398.35	-6255.33	-1383.99	40°10'50.4384"N	104°37'48.6252"W	0.66	-104.28	0.30	-0.59	
13079.00	90.430	178.290	7029.13	2145.13	6491.89	-6350.31	-1383.27	40°10'49.4998"N	104°37'48.6279"W	2.77	109.55	-0.68	-2.68	
13173.00	89.780	180.120	7028.96	2144.96	6584.35	-6444.29	-1381.96	40°10'48.5709"N	104°37'48.6230"W	2.07	65.56	-0.69	1.95	
13268.00	89.880	180.340	7029.24	2145.24	6678.10	-6539.29	-1382.34	40°10'47.6322"N	104°37'48.6399"W	0.25	-122.01	0.11	0.23	
13363.00	89.780	180.180	7029.52	2145.52	6771.84	-6634.29	-1382.78	40°10'46.6935"N	104°37'48.6575"W	0.20	172.09	-0.11	-0.17	
13457.00	89.420	180.230	7030.18	2146.18	6864.59	-6728.29	-1383.11	40°10'45.7647"N	104°37'48.6737"W	0.39	90.00	-0.38	0.05	
13552.00	89.420	180.420	7031.14	2147.14	6958.35	-6823.28	-1383.65	40°10'44.8261"N	104°37'48.6926"W	0.20	45.38	0.00	0.20	
13647.00	90.180	181.190	7031.47	2147.47	7052.24	-6918.27	-1384.99	40°10'43.8876"N	104°37'48.7218"W	1.14	-125.67	0.80	0.81	
13742.00	89.570	180.340	7031.68	2147.68	7146.12	-7013.26	-1386.25	40°10'42.9491"N	104°37'48.7502"W	1.10	-106.39	-0.64	-0.89	
13836.00	89.320	179.490	7032.59	2148.59	7238.78	-7107.26	-1386.11	40°10'42.0203"N	104°37'48.7602"W	0.94	83.72	-0.27	-0.90	
13931.00	89.630	182.300	7033.46	2149.46	7332.68	-7202.23	-1387.60	40°10'41.0819"N	104°37'48.7914"W	2.98	90.00	0.33	2.96	
14025.00	89.630	182.640	7034.07	2150.07	7425.96	-7296.14	-1391.65	40°10'40.1543"N	104°37'48.8554"W	0.36	102.31	0.00	0.36	
14120.00	89.510	183.190	7034.78	2150.78	7520.32	-7391.02	-1396.48	40°10'39.2173"N	104°37'48.9296"W	0.59	-86.66	-0.13	0.58	
14214.00	89.630	181.140	7035.49	2151.49	7613.53	-7484.94	-1400.03	40°10'38.2895"N	104°37'48.9872"W	2.18	84.16	0.13	-2.18	
14309.00	89.720	182.020	7036.03	2152.03	7707.60	-7579.90	-1402.65	40°10'37.3514"N	104°37'49.0330"W	0.93	-91.38	0.09	0.93	
14404.00	89.690	180.770	7036.51	2152.51	7801.64	-7674.87	-1404.96	40°10'36.4132"N	104°37'49.0748"W	1.32	-49.40	-0.03	-1.32	
14498.00	89.750	180.700	7036.97	2152.97	7894.52	-7768.86	-1406.17	40°10'35.4845"N	104°37'49.1022"W	0.10	48.43	0.06	-0.07	
14593.00	90.220	181.230	7037.00	2153.00	7988.45	-7863.85	-1407.77	40°10'34.5461"N	104°37'49.1348"W	0.75	-164.62	0.49	0.56	
14688.00	89.820	181.120	7036.97	2152.97	8082.43	-7958.83	-1409.72	40°10'33.6077"N	104°37'49.1719"W	0.44	-160.12	-0.42	-0.12	
14782.00	89.350	180.950	7037.65	2153.65	8175.39	-8052.81	-1411.41	40°10'32.6792"N	104°37'49.2056"W	0.53	-55.67	-0.50	-0.18	
14877.00	89.630	180.540	7038.49	2154.49	8269.26	-8147.80	-1412.65	40°10'31.7407"N	104°37'49.2335"W	0.52	46.24	0.29	-0.43	
14971.00	90.310	181.250	7038.54	2154.54	8362.19	-8241.78	-1414.12	40°10'30.8121"N	104°37'49.2643"W	1.05	-54.46	0.72	0.76	
15066.00	90.460	181.040	7037.90	2153.90	8456.16	-8336.76	-1416.02	40°10'29.8737"N	104°37'49.3008"W	0.27	-112.00	0.16	-0.22	
15161.00	90.060	180.050	7037.47	2153.47	8549.98	-8431.76	-1416.92	40°10'28.9351"N	104°37'49.3244"W	1.12	0.00	-0.42	-1.04	LAST BH MWD SURVEY
15202.00‡	90.060	180.050	7037.43	2153.43	8590.42	-8472.76	-1416.96	40°10'28.5300"N	104°37'49.3301"W	0.00		0.00	0.00	EXTRAPOLATED TO TD

HOLE & CASING SECTIONS - Ref Wellbore: HURLEY H35-746 AWB Ref Wellpath: HURLEY H35-746 AWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	30.00	1930.00	1900.00	30.00	1929.97	-0.02	-0.02	1.72	-3.24
9.625in Casing Surface	30.00	1930.00	1900.00	30.00	1929.97	-0.02	-0.02	1.72	-3.24
8.5in Open Hole	1930.00	15202.00	13272.00	1929.97	7037.43	1.72	-3.24	-8472.76	-1416.96

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	HURLEY H35-746
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.26-T03N-R65W	Wellbore	HURLEY H35-746 AWB
Slot	SLOT#47 HURLEY H35-746 (2084'FNL&1065'FEL,SEC.26)		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
HURLEY H35-746 BHL REV-1 (75'FSL & 2413'FEL, SEC.32)	7031.77	-8473.47	-1428.28	3242991.18	1307637.50	40°10'28.5240"N	104°37'49.4760"W	point
HURLEY H35-746 TPZ REV-1	7045.00	-892.21	-1344.11	3243075.35	1315218.42	40°11'43.4303"N	104°37'47.4334"W	point
SECTION LINES - HURLEY STATE SEC.26-T03N-R65W	9000.00	2078.46	-4280.49	3240139.09	1318188.96	40°12'13.0680"N	104°38'24.9000"W	polygon
	2D Polygon: dimensions not calculated							
SECTION LINES - HURLEY STATE SEC.35-T03N-R65W	9000.00	-5851.97	-4203.60	3240215.98	1310258.89	40°10'54.6960"N	104°38'24.9000"W	polygon
	2D Polygon: dimensions not calculated							

WELLPATH COMPOSITION - Ref Wellbore: HURLEY H35-746 AWB Ref Wellpath: HURLEY H35-746 AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1920.00	Gyrodata 2015 - GC+DROP+COND	13.5" GYRODATA (GYRODATA 2015-GC+DROP+COND) <0'-1920'>	HURLEY H35-746 AWB	1/14/2020
1920.00	15202.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	8.5" ATC (OWSG MWD REV.2+IFR1+MSA) <2002'-15161'>	HURLEY H35-746 AWB	1/14/2020

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	HURLEY H35-746
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.26-T03N-R65W	Wellbore	HURLEY H35-746 AWB
Slot	SLOT#47 HURLEY H35-746 (2084'FNL&1065'FEL,SEC.26)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
80.00	0.280	213.840	80.00	3RD PARTY FIRST GYRO SURVEY
1920.00	0.680	316.950	1919.97	TIE ON TO 3RD PARTY GYRO SURVEY
2002.00	0.620	336.630	2001.97	FIRST BH MWD SURVEY
15161.00	90.060	180.050	7037.47	LAST BH MWD SURVEY
15202.00	90.060	180.050	7037.43	EXTRAPOLATED TO TD