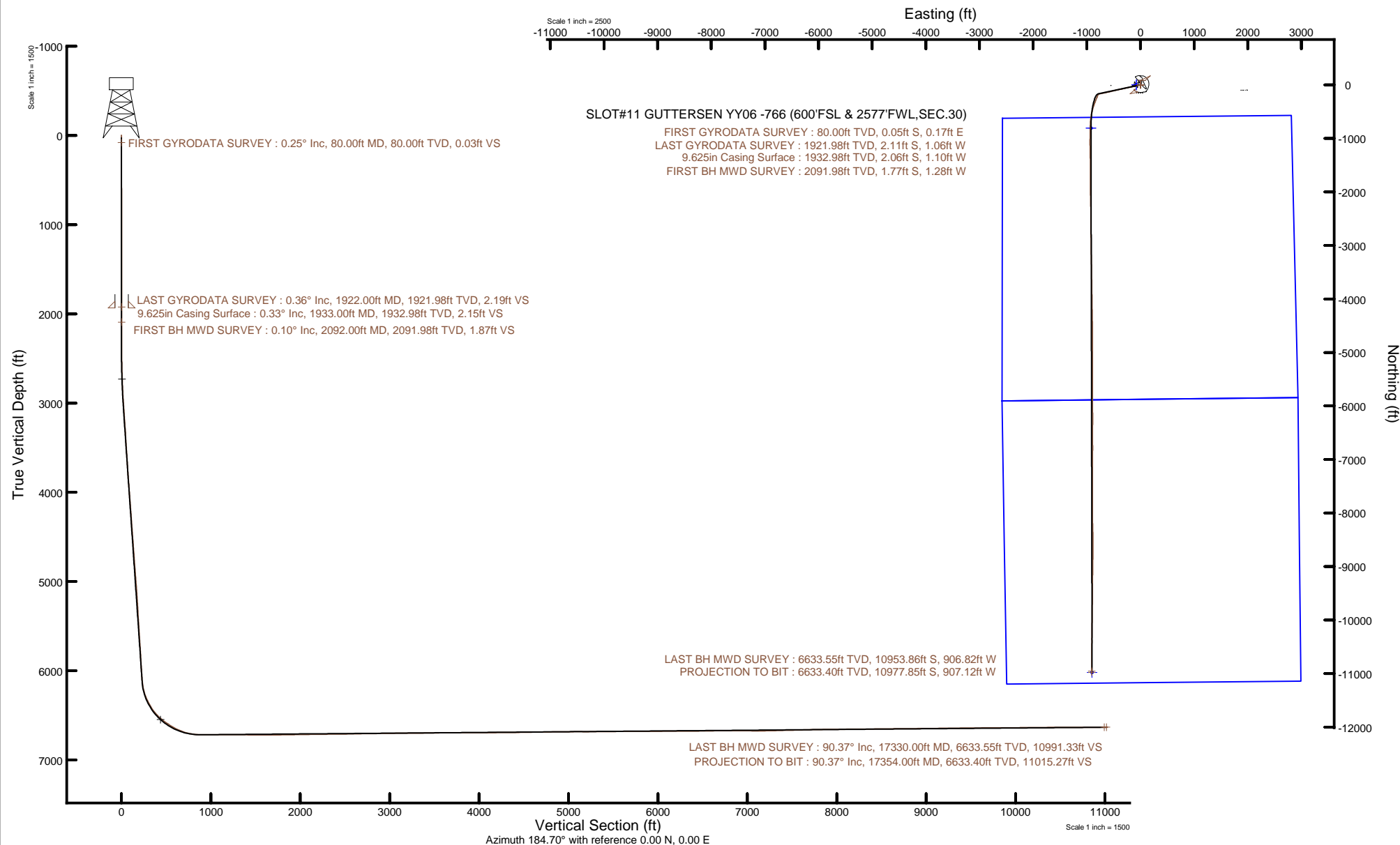


NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GUTTERSEN YY06 -766
Facility: SEC.30-T03N-R63W Wellbore: GUTTERSEN YY06 -766 PWB



Plot reference wellpath is GUTTERSEN YY06 -766 PWP Rev-B.0	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (30) (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to RIG (30) (RKB)	Scale: True distance
RIG (30) (RKB) to Mean Sea Level: 4820 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Mud line (At Slot: SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: painsetr on 2020-07-20; Database: WA_Denver





Actual Wellpath Report

GUTTERSEN YY06 -766 AWP

Page 1 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWB
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Painsetr
Scale	0.999957	Report Generated	7/20/2020 at 10:46:30 AM
Convergence at slot	0.66° East	Database	WA_Denver

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	148.54	73.75	3284635.27	1313984.62	40.1907954°	-104.4811299°
Facility Reference Pt			3284561.52	1313836.09	40.1903900°	-104.4814000°
Field Reference Pt			3000000.00	4454105.15	48.7761986°	-105.5000000°

WELLPATH DATUM

Calculation method	Minimum curvature	RIG (30') (RKB) to Facility Vertical Datum	4820.00ft
Horizontal Reference Pt	Slot	RIG (30') (RKB) to Mean Sea Level	4820.00ft
Vertical Reference Pt	RIG (30') (RKB)	RIG (30') (RKB) to Mud Line at Slot (SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30))	4820.00ft
MD Reference Pt	RIG (30') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	184.70°

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWB
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

WELLPATH DATA (181 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
0.00	0.000	105.830	0.00	0.00	0.00	0.00	40.1907954	-104.4811299	0.00	0.00	0.00	0.00	
80.00	0.250	105.830	80.00	0.03	-0.05	0.17	40.1907953	-104.4811293	0.31	18.60	0.31	0.00	FIRST GYRODATA SURVEY
173.00	0.580	116.530	173.00	0.25	-0.31	0.78	40.1907945	-104.4811271	0.36	-169.20	0.35	11.51	
265.00	0.130	4.050	265.00	0.32	-0.42	1.21	40.1907942	-104.4811256	0.70	-68.52	-0.49	-122.26	
360.00	0.420	312.270	359.99	0.00	-0.08	0.96	40.1907952	-104.4811265	0.37	-137.86	0.31	-54.51	
455.00	0.360	225.930	454.99	0.01	-0.05	0.49	40.1907952	-104.4811282	0.56	-105.14	-0.06	-90.88	
550.00	0.430	174.700	549.99	0.58	-0.61	0.30	40.1907937	-104.4811289	0.37	147.11	0.07	-53.93	
645.00	0.250	210.870	644.99	1.12	-1.14	0.23	40.1907922	-104.4811291	0.29	-176.56	-0.19	38.07	
739.00	0.040	56.370	738.99	1.29	-1.30	0.15	40.1907918	-104.4811294	0.30	-61.65	-0.22	-164.36	
834.00	0.190	5.400	833.99	1.11	-1.13	0.20	40.1907923	-104.4811293	0.18	113.97	0.16	-53.65	
929.00	0.340	88.670	928.99	0.92	-0.96	0.49	40.1907927	-104.4811282	0.39	141.79	0.16	87.65	
1023.00	0.240	169.260	1022.99	1.08	-1.15	0.81	40.1907922	-104.4811271	0.41	93.76	-0.11	85.73	
1118.00	0.340	218.240	1117.99	1.51	-1.57	0.67	40.1907911	-104.4811276	0.27	-132.71	0.11	51.56	
1213.00	0.260	159.440	1212.99	1.94	-1.99	0.57	40.1907899	-104.4811280	0.32	116.94	-0.08	-61.89	
1307.00	0.250	208.390	1306.98	2.32	-2.37	0.55	40.1907889	-104.4811281	0.22	134.42	-0.01	52.07	
1402.00	0.210	284.570	1401.98	2.48	-2.51	0.28	40.1907885	-104.4811290	0.30	-154.07	-0.04	80.19	
1497.00	0.110	187.110	1496.98	2.54	-2.56	0.10	40.1907884	-104.4811297	0.26	126.32	-0.11	-102.59	
1591.00	0.140	274.150	1590.98	2.63	-2.64	-0.02	40.1907882	-104.4811301	0.18	-106.50	0.03	92.60	
1686.00	0.140	241.160	1685.98	2.70	-2.68	-0.24	40.1907880	-104.4811309	0.08	90.35	0.00	-34.73	
1781.00	0.300	303.690	1780.98	2.64	-2.60	-0.55	40.1907883	-104.4811320	0.28	124.53	0.17	65.82	
1876.00	0.260	320.130	1875.98	2.36	-2.30	-0.89	40.1907891	-104.4811332	0.09	-11.04	-0.04	17.31	
1922.00	0.360	317.040	1921.98	2.19	-2.11	-1.06	40.1907896	-104.4811338	0.22	174.32	0.22	-6.72	LAST GYRODATA SURVEY
2092.00	0.100	110.500	2091.98	1.87	-1.77	-1.28	40.1907906	-104.4811346	0.27	98.10	-0.15	90.27	FIRST BH MWD SURVEY
2187.00	0.100	126.700	2186.98	1.94	-1.85	-1.14	40.1907903	-104.4811341	0.03	135.75	0.00	17.05	
2281.00	0.070	176.980	2280.98	2.04	-1.96	-1.07	40.1907900	-104.4811338	0.08	-126.31	-0.03	53.49	
2376.00	0.100	85.010	2375.98	2.08	-2.01	-0.99	40.1907899	-104.4811335	0.13	172.73	0.03	-96.81	
2471.00	2.350	257.430	2470.95	2.65	-2.43	-2.81	40.1907888	-104.4811401	2.58	3.38	2.37	181.49	
2565.00	3.200	258.330	2564.84	3.96	-3.38	-7.26	40.1907864	-104.4811560	0.91	-3.42	0.90	0.96	
2660.00	4.860	257.160	2659.60	5.92	-4.81	-13.78	40.1907826	-104.4811794	1.75	3.65	1.75	-1.23	
2754.00	7.840	258.550	2753.02	8.90	-6.97	-23.94	40.1907770	-104.4812159	3.17	-0.83	3.17	1.48	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWB
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

WELLPATH DATA (181 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
2849.00	10.460	258.340	2846.80	13.14	-10.00	-38.74	40.1907692	-104.4812690	2.76	-1.12	2.76	-0.22	
2944.00	11.700	258.220	2940.03	18.30	-13.70	-56.62	40.1907596	-104.4813331	1.31	-1.19	1.31	-0.13	
3039.00	13.500	258.060	3032.74	24.21	-17.97	-76.90	40.1907485	-104.4814059	1.90	-177.34	1.89	-0.17	
3133.00	12.100	257.750	3124.40	30.22	-22.33	-97.26	40.1907372	-104.4814789	1.49	-11.08	-1.49	-0.33	
3228.00	12.590	257.310	3217.20	36.22	-26.71	-117.09	40.1907258	-104.4815501	0.53	177.83	0.52	-0.46	
3323.00	12.200	257.380	3309.99	42.30	-31.18	-136.99	40.1907141	-104.4816215	0.41	-175.92	-0.41	0.07	
3418.00	10.760	256.830	3403.08	48.01	-35.40	-155.42	40.1907031	-104.4816876	1.52	28.13	-1.52	-0.58	
3512.00	11.130	257.850	3495.37	53.33	-39.30	-172.83	40.1906930	-104.4817501	0.44	6.25	0.39	1.09	
3607.00	12.720	258.640	3588.32	58.88	-43.29	-192.05	40.1906826	-104.4818191	1.68	-1.58	1.67	0.83	
3702.00	13.570	258.540	3680.83	64.88	-47.57	-213.23	40.1906715	-104.4818950	0.90	-6.48	0.89	-0.11	
3796.00	14.040	258.320	3772.11	71.16	-52.07	-235.20	40.1906599	-104.4819739	0.50	-56.41	0.50	-0.23	
3891.00	14.110	257.890	3864.26	77.76	-56.83	-257.81	40.1906475	-104.4820550	0.13	-87.45	0.07	-0.45	
3986.00	14.120	257.090	3956.39	84.62	-61.85	-280.43	40.1906345	-104.4821361	0.21	172.14	0.01	-0.84	
4081.00	13.980	257.170	4048.55	91.58	-66.99	-302.91	40.1906211	-104.4822168	0.15	24.82	-0.15	0.08	
4175.00	14.080	257.360	4139.75	98.41	-72.01	-325.14	40.1906080	-104.4822966	0.12	173.16	0.11	0.20	
4270.00	13.880	257.460	4231.93	105.23	-77.01	-347.54	40.1905950	-104.4823770	0.21	61.87	-0.21	0.11	
4365.00	13.990	258.300	4324.14	111.85	-81.81	-369.91	40.1905825	-104.4824572	0.24	-70.32	0.12	0.88	
4459.00	14.050	257.620	4415.34	118.41	-86.56	-392.18	40.1905701	-104.4825371	0.19	-141.81	0.06	-0.72	
4554.00	13.940	257.260	4507.52	125.22	-91.56	-414.60	40.1905571	-104.4826176	0.15	166.53	-0.12	-0.38	
4649.00	13.860	257.340	4599.74	132.05	-96.58	-436.87	40.1905441	-104.4826975	0.09	100.49	-0.08	0.08	
4743.00	13.830	258.040	4691.01	138.63	-101.37	-458.84	40.1905316	-104.4827763	0.18	14.73	-0.03	0.74	
4838.00	13.940	258.160	4783.23	145.14	-106.07	-481.15	40.1905194	-104.4828564	0.12	-143.25	0.12	0.13	
4932.00	13.530	256.840	4874.54	151.73	-110.90	-502.94	40.1905068	-104.4829345	0.55	-40.84	-0.44	-1.40	
5027.00	13.950	255.350	4966.82	158.94	-116.33	-524.84	40.1904926	-104.4830131	0.58	154.18	0.44	-1.57	
5122.00	13.420	256.460	5059.13	166.18	-121.80	-546.63	40.1904783	-104.4830914	0.62	138.60	-0.56	1.17	
5216.00	12.980	258.210	5150.64	172.59	-126.52	-567.57	40.1904660	-104.4831665	0.63	-171.26	-0.47	1.86	
5311.00	10.320	255.920	5243.68	178.36	-130.77	-586.27	40.1904549	-104.4832336	2.84	27.59	-2.80	-2.41	
5406.00	11.430	258.810	5336.97	183.68	-134.66	-603.76	40.1904448	-104.4832964	1.30	-12.91	1.17	3.04	
5501.00	12.510	257.670	5429.90	189.27	-138.69	-623.05	40.1904344	-104.4833656	1.16	163.23	1.14	-1.20	
5595.00	12.080	258.290	5521.75	195.03	-142.86	-642.63	40.1904235	-104.4834358	0.48	-178.69	-0.46	0.66	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWB
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

WELLPATH DATA (181 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
5690.00	11.640	258.240	5614.72	200.55	-146.83	-661.74	40.1904132	-104.4835044	0.46	-0.76	-0.46	-0.05	
5785.00	12.280	258.200	5707.66	206.14	-150.85	-681.02	40.1904028	-104.4835735	0.67	-43.81	0.67	-0.04	
5879.00	12.300	258.110	5799.50	211.83	-154.95	-700.60	40.1903921	-104.4836438	0.03	16.80	0.02	-0.10	
5974.00	12.450	258.320	5892.30	217.61	-159.11	-720.53	40.1903814	-104.4837153	0.16	90.78	0.16	0.22	
6069.00	12.450	259.910	5985.06	223.11	-162.98	-740.64	40.1903714	-104.4837874	0.36	-133.02	0.00	1.67	
6163.00	12.210	258.680	6076.89	228.44	-166.71	-760.36	40.1903618	-104.4838582	0.38	-58.74	-0.26	-1.31	
6258.00	15.660	241.500	6169.12	238.24	-174.80	-781.50	40.1903402	-104.4839341	5.63	-97.00	3.63	-18.08	
6352.00	19.070	197.790	6259.19	260.24	-195.57	-797.41	40.1902837	-104.4839919	13.99	13.31	3.63	-46.50	
6447.00	27.000	201.880	6346.56	296.02	-230.41	-810.21	40.1901885	-104.4840392	8.51	2.16	8.35	4.31	
6542.00	35.090	202.410	6427.88	342.71	-275.75	-828.68	40.1900646	-104.4841072	8.52	-5.17	8.52	0.56	
6637.00	44.610	201.190	6500.73	400.85	-332.22	-851.20	40.1899103	-104.4841901	10.05	-16.15	10.02	-1.28	
6731.00	53.910	197.890	6562.02	469.63	-399.30	-874.86	40.1897269	-104.4842775	10.24	-28.37	9.89	-3.51	
6826.00	58.060	195.270	6615.16	546.67	-474.76	-897.28	40.1895205	-104.4843608	4.93	-36.67	4.37	-2.76	
6921.00	64.760	189.860	6660.62	629.23	-556.11	-915.28	40.1892978	-104.4844286	8.64	-24.59	7.05	-5.69	
7016.00	74.130	185.450	6693.95	717.94	-644.16	-927.01	40.1890565	-104.4844742	10.78	-14.00	9.86	-4.64	
7110.00	82.810	183.280	6712.73	809.95	-735.90	-933.98	40.1888049	-104.4845029	9.51	-19.59	9.23	-2.31	
7205.00	90.310	180.620	6718.42	904.59	-830.60	-937.20	40.1885451	-104.4845183	8.37	-152.82	7.89	-2.80	
7300.00	89.940	180.430	6718.22	999.34	-925.60	-938.07	40.1882843	-104.4845253	0.44	33.98	-0.39	-0.20	
7394.00	90.400	180.740	6717.94	1093.10	-1019.59	-939.03	40.1880264	-104.4845326	0.59	-95.44	0.49	0.33	
7489.00	90.280	179.480	6717.37	1187.79	-1114.59	-939.21	40.1877656	-104.4845371	1.33	127.41	-0.13	-1.33	
7584.00	90.150	179.650	6717.02	1282.41	-1209.58	-938.49	40.1875049	-104.4845384	0.23	-130.52	-0.14	0.18	
7678.00	88.800	178.070	6717.88	1375.91	-1303.56	-936.62	40.1872469	-104.4845356	2.21	117.89	-1.44	-1.68	
7773.00	88.340	178.940	6720.25	1470.33	-1398.49	-934.14	40.1869862	-104.4845306	1.04	32.56	-0.48	0.92	
7868.00	90.580	180.370	6721.14	1564.95	-1493.48	-933.57	40.1867255	-104.4845325	2.80	-96.50	2.36	1.51	
7963.00	90.490	179.580	6720.26	1659.62	-1588.47	-933.53	40.1864647	-104.4845362	0.84	6.71	-0.09	-0.83	
8058.00	90.830	179.620	6719.16	1754.24	-1683.47	-932.87	40.1862040	-104.4845377	0.36	-75.96	0.36	0.04	
8152.00	90.920	179.260	6717.73	1847.83	-1777.45	-931.95	40.1859460	-104.4845383	0.39	97.65	0.10	-0.38	
8247.00	90.830	179.930	6716.28	1942.44	-1872.44	-931.28	40.1856852	-104.4845398	0.71	-64.65	-0.09	0.71	
8342.00	90.920	179.740	6714.83	2037.09	-1967.42	-931.00	40.1854245	-104.4845427	0.22	90.00	0.09	-0.20	
8436.00	90.920	179.850	6713.32	2130.73	-2061.41	-930.67	40.1851665	-104.4845454	0.12	-104.73	0.00	0.12	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWP
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

WELLPATH DATA (181 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
8531.00	90.520	178.330	6712.12	2225.27	-2156.39	-929.16	40.1849058	-104.4845438	1.65	82.92	-0.42	-1.60	
8721.00	90.680	179.620	6710.13	2414.30	-2346.34	-925.76	40.1843843	-104.4845395	0.68	-90.00	0.08	0.68	
8816.00	90.680	179.460	6709.01	2508.91	-2441.33	-925.00	40.1841235	-104.4845406	0.17	-44.99	0.00	-0.17	
8910.00	91.110	179.030	6707.54	2602.47	-2535.31	-923.76	40.1838655	-104.4845401	0.65	112.45	0.46	-0.46	
9005.00	90.800	179.780	6705.95	2697.06	-2630.29	-922.77	40.1836048	-104.4845404	0.85	89.99	-0.33	0.79	
9100.00	90.800	180.710	6704.63	2791.76	-2725.28	-923.18	40.1833440	-104.4845458	0.98	-88.94	0.00	0.98	
9194.00	90.830	179.070	6703.29	2885.41	-2819.27	-923.00	40.1830861	-104.4845490	1.74	132.06	0.03	-1.74	
9289.00	90.460	179.480	6702.22	2979.98	-2914.26	-921.80	40.1828253	-104.4845486	0.58	-50.77	-0.39	0.43	
9384.00	90.860	178.990	6701.13	3074.54	-3009.24	-920.53	40.1825646	-104.4845479	0.67	121.22	0.42	-0.52	
9478.00	90.460	179.650	6700.04	3168.12	-3103.23	-919.41	40.1823065	-104.4845478	0.82	-105.69	-0.43	0.70	
9573.00	90.120	178.440	6699.56	3262.66	-3198.21	-917.83	40.1820458	-104.4845460	1.32	17.86	-0.36	-1.27	
9762.00	91.020	178.730	6697.68	3450.57	-3387.14	-913.16	40.1815270	-104.4845370	0.50	106.40	0.48	0.15	
9856.00	90.490	180.530	6696.44	3544.19	-3481.13	-912.56	40.1812691	-104.4845387	2.00	-102.12	-0.56	1.91	
9951.00	90.000	178.250	6696.04	3638.78	-3576.12	-911.54	40.1810083	-104.4845390	2.45	82.46	-0.52	-2.40	
10140.00	90.180	179.610	6695.74	3826.81	-3765.08	-908.01	40.1804895	-104.4845341	0.73	-90.00	0.10	0.72	
10235.00	90.180	178.900	6695.44	3921.38	-3860.07	-906.78	40.1802287	-104.4845336	0.75	116.57	0.00	-0.75	
10329.00	90.090	179.080	6695.22	4014.92	-3954.05	-905.12	40.1799707	-104.4845315	0.21	10.56	-0.10	0.19	
10424.00	90.680	179.190	6694.58	4109.47	-4049.04	-903.69	40.1797100	-104.4845303	0.63	165.26	0.62	0.12	
10519.00	90.490	179.240	6693.61	4204.03	-4144.03	-902.39	40.1794492	-104.4845295	0.21	-90.00	-0.20	0.05	
10614.00	90.490	178.400	6692.80	4298.52	-4239.00	-900.43	40.1791884	-104.4845264	0.88	81.87	0.00	-0.88	
10708.00	90.620	179.310	6691.89	4392.03	-4332.98	-898.55	40.1789304	-104.4845235	0.98	-79.79	0.14	0.97	
10803.00	90.710	178.810	6690.79	4486.56	-4427.96	-896.99	40.1786697	-104.4845218	0.53	28.30	0.09	-0.53	
10898.00	91.230	179.090	6689.18	4581.07	-4522.93	-895.25	40.1784090	-104.4845195	0.62	131.88	0.55	0.29	
10992.00	90.710	179.670	6687.59	4674.65	-4616.91	-894.24	40.1781510	-104.4845197	0.83	100.05	-0.55	0.62	
11087.00	90.460	181.080	6686.62	4769.37	-4711.90	-894.86	40.1778903	-104.4845258	1.51	-91.13	-0.26	1.48	
11182.00	90.430	179.560	6685.88	4864.09	-4806.89	-895.39	40.1776295	-104.4845316	1.60	86.22	-0.03	-1.60	
11277.00	90.550	181.380	6685.07	4958.82	-4901.88	-896.17	40.1773688	-104.4845383	1.92	-77.50	0.13	1.92	
11371.00	90.920	179.710	6683.86	5052.57	-4995.87	-897.06	40.1771109	-104.4845454	1.82	154.59	0.39	-1.78	
11466.00	89.320	180.470	6683.66	5147.26	-5090.86	-897.21	40.1768501	-104.4845498	1.86	-42.84	-1.68	0.80	
11560.00	90.830	179.070	6683.54	5240.90	-5184.86	-896.83	40.1765921	-104.4845523	2.19	135.63	1.61	-1.49	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWP
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

WELLPATH DATA (181 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
11655.00	90.370	179.520	6682.55	5335.47	-5279.84	-895.66	40.1763314	-104.4845520	0.68	86.18	-0.48	0.47	
11749.00	90.400	179.970	6681.91	5429.12	-5373.84	-895.25	40.1760734	-104.4845543	0.48	-146.31	0.03	0.48	
11844.00	90.370	179.950	6681.28	5523.79	-5468.84	-895.18	40.1758126	-104.4845580	0.04	75.96	-0.03	-0.02	
11939.00	90.400	180.070	6680.64	5618.47	-5563.84	-895.20	40.1755518	-104.4845620	0.13	-126.11	0.03	0.13	
12033.00	89.780	179.220	6680.49	5712.11	-5657.83	-894.61	40.1752938	-104.4845637	1.12	49.97	-0.66	-0.90	
12128.00	90.620	180.220	6680.16	5806.75	-5752.83	-894.15	40.1750331	-104.4845660	1.37	131.29	0.88	1.05	
12222.00	89.970	180.960	6679.67	5900.50	-5846.82	-895.12	40.1747751	-104.4845733	1.05	-37.12	-0.69	0.79	
12317.00	90.340	180.680	6679.42	5995.28	-5941.81	-896.48	40.1745144	-104.4845820	0.49	-63.56	0.39	-0.29	
12412.00	91.200	178.950	6678.14	6089.93	-6036.80	-896.17	40.1742537	-104.4845848	2.03	-140.59	0.91	-1.82	
12507.00	89.350	177.430	6677.68	6184.30	-6131.74	-893.17	40.1739930	-104.4845780	2.52	71.12	-1.95	-1.60	
12601.00	90.120	179.680	6678.12	6277.76	-6225.70	-890.80	40.1737350	-104.4845733	2.53	77.25	0.82	2.39	
12696.00	90.620	181.890	6677.51	6372.53	-6320.69	-892.10	40.1734743	-104.4845819	2.39	-69.32	0.53	2.33	
12791.00	91.050	180.750	6676.12	6467.35	-6415.65	-894.29	40.1732137	-104.4845936	1.28	-121.20	0.45	-1.20	
12885.00	90.620	180.040	6674.75	6561.07	-6509.64	-894.94	40.1729558	-104.4845998	0.88	44.99	-0.46	-0.76	
12980.00	91.050	180.470	6673.37	6655.78	-6604.63	-895.36	40.1726951	-104.4846052	0.64	-125.65	0.45	0.45	
13075.00	89.450	178.240	6672.95	6750.36	-6699.61	-894.29	40.1724343	-104.4846053	2.89	67.95	-1.68	-2.35	
13170.00	90.090	179.820	6673.33	6844.89	-6794.59	-892.68	40.1721736	-104.4846034	1.79	82.47	0.67	1.66	
13264.00	90.490	182.850	6672.86	6938.71	-6888.55	-894.87	40.1719157	-104.4846151	3.25	-118.41	0.43	3.22	
13359.00	88.770	179.670	6673.47	7033.52	-6983.51	-896.96	40.1716551	-104.4846264	3.81	26.26	-1.81	-3.35	
13454.00	90.250	180.400	6674.28	7128.20	-7078.51	-897.02	40.1713944	-104.4846305	1.74	-74.90	1.56	0.77	
13548.00	90.800	178.360	6673.42	7221.79	-7172.49	-896.00	40.1711364	-104.4846308	2.25	66.77	0.59	-2.17	
13642.00	91.820	180.740	6671.27	7315.38	-7266.46	-895.26	40.1708785	-104.4846320	2.75	-144.47	1.09	2.53	
13737.00	91.260	180.340	6668.72	7410.09	-7361.42	-896.16	40.1706178	-104.4846391	0.72	-89.99	-0.59	-0.42	
13832.00	91.260	179.060	6666.63	7504.70	-7456.39	-895.66	40.1703571	-104.4846412	1.35	73.78	0.00	-1.35	
13926.00	91.690	180.540	6664.21	7598.33	-7550.36	-895.33	40.1700992	-104.4846438	1.64	-112.90	0.46	1.57	
14021.00	91.390	179.830	6661.66	7693.00	-7645.32	-895.64	40.1698385	-104.4846488	0.81	125.14	-0.32	-0.75	
14115.00	91.200	180.100	6659.53	7786.65	-7739.30	-895.58	40.1695806	-104.4846525	0.35	-140.44	-0.20	0.29	
14210.00	90.280	179.340	6658.31	7881.28	-7834.29	-895.12	40.1693199	-104.4846547	1.26	57.93	-0.97	-0.80	
14304.00	90.800	180.170	6657.42	7974.93	-7928.28	-894.72	40.1690618	-104.4846571	1.04	-135.73	0.55	0.88	
14399.00	90.400	179.780	6656.43	8069.60	-8023.27	-894.68	40.1688011	-104.4846609	0.59	-101.50	-0.42	-0.41	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWP
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

WELLPATH DATA (181 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
14587.00	90.280	179.190	6655.31	8256.82	-8211.26	-892.99	40.1682850	-104.4846625	0.32	-65.39	-0.06	-0.31	
14682.00	90.770	178.120	6654.44	8351.28	-8306.23	-890.76	40.1680243	-104.4846584	1.24	-142.43	0.52	-1.13	
14777.00	90.250	177.720	6653.59	8445.62	-8401.16	-887.31	40.1677636	-104.4846500	0.69	73.12	-0.55	-0.42	
14871.00	90.920	179.930	6652.63	8539.11	-8495.13	-885.38	40.1675056	-104.4846469	2.46	95.04	0.71	2.35	
14966.00	90.830	180.950	6651.18	8633.84	-8590.12	-886.11	40.1672449	-104.4846534	1.08	-123.54	-0.09	1.07	
15061.00	90.220	180.030	6650.31	8728.58	-8685.11	-886.92	40.1669842	-104.4846602	1.16	77.00	-0.64	-0.97	
15156.00	90.370	180.680	6649.82	8823.30	-8780.10	-887.51	40.1667235	-104.4846662	0.70	41.71	0.16	0.68	
15250.00	91.200	181.420	6648.54	8917.10	-8874.08	-889.23	40.1664656	-104.4846762	1.18	-125.29	0.88	0.79	
15345.00	90.400	180.290	6647.21	9011.87	-8969.06	-890.65	40.1662050	-104.4846852	1.46	82.97	-0.84	-1.19	
15439.00	90.490	181.020	6646.48	9105.64	-9063.05	-891.73	40.1659470	-104.4846929	0.78	-64.29	0.10	0.78	
15534.00	90.620	180.750	6645.56	9200.42	-9158.03	-893.19	40.1656863	-104.4847020	0.32	-119.06	0.14	-0.28	
15629.00	90.520	180.570	6644.61	9295.18	-9253.02	-894.29	40.1654256	-104.4847099	0.22	-82.95	-0.11	-0.19	
15724.00	90.740	178.790	6643.57	9389.81	-9348.01	-893.76	40.1651649	-104.4847118	1.89	85.47	0.23	-1.87	
15819.00	90.950	181.450	6642.17	9484.48	-9442.99	-893.96	40.1649042	-104.4847164	2.81	-125.28	0.22	2.80	
15913.00	90.030	180.150	6641.36	9578.26	-9536.97	-895.27	40.1646463	-104.4847250	1.69	50.46	-0.98	-1.38	
16008.00	90.550	180.780	6640.88	9673.00	-9631.97	-896.04	40.1643855	-104.4847316	0.86	138.01	0.55	0.66	
16103.00	90.250	181.050	6640.22	9767.79	-9726.95	-897.56	40.1641249	-104.4847410	0.42	-86.01	-0.32	0.28	
16198.00	90.280	180.620	6639.78	9862.57	-9821.94	-898.94	40.1638642	-104.4847498	0.45	90.00	0.03	-0.45	
16292.00	90.280	180.780	6639.32	9956.34	-9915.93	-900.09	40.1636062	-104.4847578	0.17	-62.65	0.00	0.17	
16387.00	90.430	180.490	6638.73	10051.10	-10010.93	-901.14	40.1633455	-104.4847654	0.34	72.15	0.16	-0.31	
16482.00	90.620	181.080	6637.86	10145.88	-10105.91	-902.44	40.1630849	-104.4847740	0.65	-145.79	0.20	0.62	
16576.00	90.370	180.910	6637.05	10239.68	-10199.90	-904.07	40.1628269	-104.4847837	0.32	-77.00	-0.27	-0.18	
16671.00	90.430	180.650	6636.39	10334.45	-10294.88	-905.37	40.1625662	-104.4847922	0.28	-93.65	0.06	-0.27	
16765.00	90.370	179.710	6635.73	10428.16	-10388.88	-905.66	40.1623083	-104.4847971	1.00	91.32	-0.06	-1.00	
16860.00	90.340	181.010	6635.14	10522.88	-10483.87	-906.26	40.1620475	-104.4848031	1.37	-103.17	-0.03	1.37	
16955.00	90.120	180.070	6634.76	10617.63	-10578.87	-907.16	40.1617868	-104.4848102	1.02	78.23	-0.23	-0.99	
17049.00	90.220	180.550	6634.48	10711.35	-10672.87	-907.66	40.1615288	-104.4848159	0.52	-101.94	0.11	0.51	
17144.00	90.000	179.510	6634.30	10806.03	-10767.87	-907.71	40.1612681	-104.4848199	1.12	-28.18	-0.23	-1.09	
17239.00	90.280	179.360	6634.07	10900.63	-10862.86	-906.78	40.1610073	-104.4848205	0.33	86.15	0.29	-0.16	
17330.00	90.370	180.700	6633.55	10991.33	-10953.86	-906.82	40.1607575	-104.4848244	1.48	0.00	0.10	1.47	LAST BH MWD SURVEY



Actual Wellpath Report

GUTTERSEN YY06 -766 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWB
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

WELLPATH DATA (181 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
17354.00†	90.370	180.700	6633.40	11015.27	-10977.85	-907.12	40.1606917	-104.4848264	0.00		0.00	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: GUTTERSEN YY06 -766 AWB Ref Wellpath: GUTTERSEN YY06 -766 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]
9.625in Casing Surface	30.00	1933.00	1903.00	30.00	1932.98	-0.01	0.02	-2.06	-1.10

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWB
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.06-T02N-R63W	-1.00	0.27	-75.01	3284560.26	1313984.89	40.1907985	-104.4813984	polygon
2D Polygon: dimensions not calculated								
SEC.31-T03N-R63W	-1.00	0.27	-75.01	3284560.26	1313984.89	40.1907985	-104.4813984	polygon
2D Polygon: dimensions not calculated								
GUTTERSEN YY06 -766 BHL Rev-2 (200'FSL & 1595'FWL,SEC.06)	6634.00	-10978.72	-902.53	3283732.78	1303006.39	40.1606892	-104.4848100	point
GUTTERSEN YY06 -766 BHL Rev-1 (200'FSL & 1595'FWL,SEC.06)	6660.00	-10978.72	-902.53	3283732.78	1303006.39	40.1606892	-104.4848100	point
GUTTERSEN YY06 -766 TPZ Rev-2 (200'FNL & 1650'FWL,SEC.31)	6718.00	-808.99	-921.96	3283713.35	1313175.66	40.1886039	-104.4844629	point
GUTTERSEN YY06 -766 TPZ Rev-1 (200'FNL & 1650'FWL,SEC.31)	6725.00	-808.99	-921.96	3283713.35	1313175.66	40.1886039	-104.4844629	point

WELLPATH COMPOSITION - Ref Wellbore: GUTTERSEN YY06 -766 AWB Ref Wellpath: GUTTERSEN YY06 -766 AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1922.00	Gyrodata 2015 - GC+DROP+COND	Gyrodata 2015 - GC+DROP+COND 13-1/2" <80 - 1922>	GUTTERSEN YY06 -766 AWB	7/19/2020
1922.00	17354.00	OWSG MWD rev2 (MS+IFR1) NOBLE	OWSG MWD Rev2 (MS+IFR1) NOBLE 8-1/2" <2092 - 17330>	GUTTERSEN YY06 -766 AWB	7/19/2020



Actual Wellpath Report

GUTTERSEN YY06 -766 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -766
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -766 AWB
Slot	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
80.00	0.250	105.830	80.00	FIRST GYRODATA SURVEY
1922.00	0.360	317.040	1921.98	LAST GYRODATA SURVEY
2092.00	0.100	110.500	2091.98	FIRST BH MWD SURVEY
17330.00	90.370	180.700	6633.55	LAST BH MWD SURVEY
17354.00	90.370	180.700	6633.40	PROJECTION TO BIT