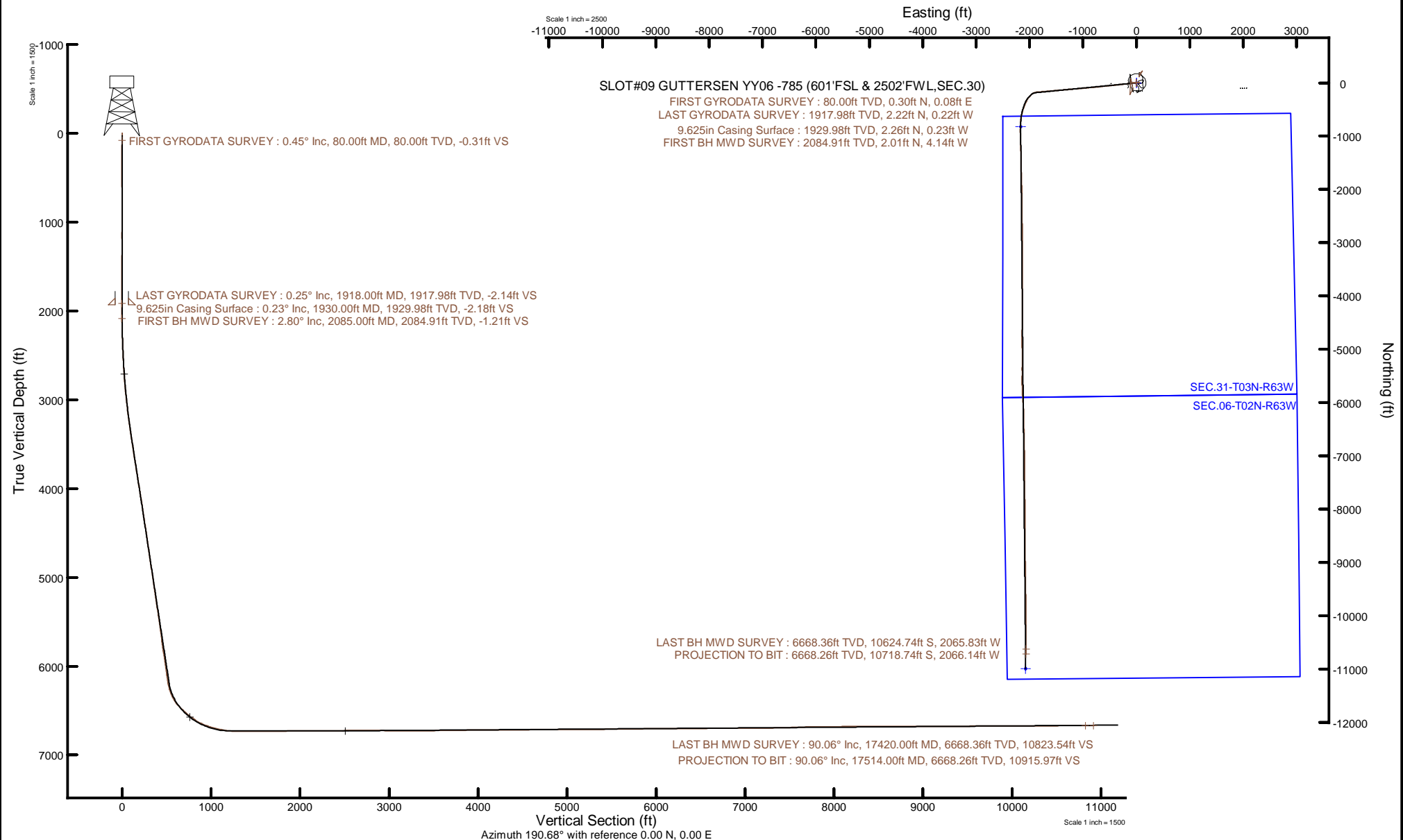


NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GUTTERSEN YY06 -785
Facility: SEC.30-T03N-R63W Wellbore: GUTTERSEN YY06 -785 PWB



Plot reference wellpath is GUTTERSEN YY06 -785 PWP Rev-A.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: 4821 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Mud line (At Slot: SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'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 2020-07-30; Database: WellArchitectDB



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWB
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'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	7/30/2020 at 6:49:03 AM
Convergence at slot	0.66° East	Database	WellArchitectDB

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	148.82	-1.25	3284560.26	1313984.89	40.1907985°	-104.4813984°
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	4821.00ft
Horizontal Reference Pt	Slot	RIG (30') (RKB) to Mean Sea Level	4821.00ft
Vertical Reference Pt	RIG (30') (RKB)	RIG (30') (RKB) to Mud Line at Slot (SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30))	4821.00ft
MD Reference Pt	RIG (30') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	190.68°

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWB
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)		

WELLPATH DATA (183 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	15.640	0.00	0.00	0.00	0.00	40.1907985	-104.4813984	0.00	0.00	0.00	0.00	
80.00	0.450	15.640	80.00	-0.31	0.30	0.08	40.1907993	-104.4813981	0.56	172.02	0.56	0.00	FIRST GYRODATA SURVEY
173.00	0.320	18.920	173.00	-0.93	0.90	0.27	40.1908010	-104.4813974	0.14	-104.53	-0.14	3.53	
265.00	0.370	331.240	265.00	-1.42	1.40	0.21	40.1908024	-104.4813976	0.31	172.22	0.05	-51.83	
360.00	0.070	97.730	359.99	-1.66	1.66	0.12	40.1908031	-104.4813979	0.44	-6.18	-0.32	133.15	
455.00	0.410	92.600	454.99	-1.71	1.64	0.51	40.1908030	-104.4813965	0.36	110.81	0.36	-5.40	
550.00	0.650	167.280	549.99	-1.26	1.10	0.97	40.1908015	-104.4813948	0.71	-172.80	0.25	78.61	
645.00	0.460	164.280	644.99	-0.43	0.21	1.19	40.1907990	-104.4813941	0.20	164.58	-0.20	-3.16	
739.00	0.260	300.810	738.99	-0.16	-0.05	1.11	40.1907983	-104.4813944	0.72	-111.15	-0.21	145.24	
834.00	0.380	229.310	833.98	0.01	-0.14	0.69	40.1907981	-104.4813959	0.41	147.12	0.13	-75.26	
929.00	0.280	328.970	928.98	0.08	-0.15	0.33	40.1907981	-104.4813972	0.54	96.19	-0.11	104.91	
1023.00	0.300	357.050	1022.98	-0.33	0.29	0.20	40.1907993	-104.4813976	0.15	-134.22	0.02	29.87	
1118.00	0.220	300.590	1117.98	-0.63	0.64	0.03	40.1908003	-104.4813982	0.27	-161.43	-0.08	-59.43	
1213.00	0.180	162.060	1212.98	-0.56	0.59	-0.08	40.1908001	-104.4813986	0.39	157.13	-0.04	-145.82	
1307.00	0.250	302.940	1306.98	-0.51	0.56	-0.21	40.1908000	-104.4813991	0.43	153.90	0.07	149.87	
1402.00	0.110	6.900	1401.98	-0.68	0.76	-0.37	40.1908006	-104.4813997	0.24	56.17	-0.15	67.33	
1497.00	0.150	25.540	1496.98	-0.89	0.96	-0.31	40.1908012	-104.4813994	0.06	172.34	0.04	19.62	
1591.00	0.020	105.610	1590.98	-1.01	1.07	-0.24	40.1908015	-104.4813992	0.16	-127.04	-0.14	85.18	
1686.00	0.250	342.230	1685.98	-1.19	1.26	-0.28	40.1908020	-104.4813993	0.28	82.64	0.24	-129.87	
1781.00	0.260	352.390	1780.98	-1.58	1.67	-0.38	40.1908031	-104.4813996	0.05	116.05	0.01	10.69	
1876.00	0.240	31.710	1875.98	-1.97	2.06	-0.30	40.1908042	-104.4813994	0.18	-84.43	-0.02	41.39	
1918.00	0.250	20.120	1917.98	-2.14	2.22	-0.22	40.1908046	-104.4813991	0.12	-122.15	0.02	-27.60	LAST GYRODATA SURVEY
2085.00	2.800	262.300	2084.91	-1.21	2.01	-4.14	40.1908042	-104.4814131	1.75	2.36	1.53	-70.55	FIRST BH MWD SURVEY
2179.00	4.430	263.170	2178.72	0.60	1.27	-10.02	40.1908023	-104.4814342	1.73	-5.99	1.73	0.93	
2274.00	5.750	261.790	2273.35	3.25	0.16	-18.37	40.1907995	-104.4814641	1.40	5.35	1.39	-1.45	
2368.00	6.740	262.580	2366.79	6.49	-1.23	-28.50	40.1907960	-104.4815004	1.06	-0.09	1.05	0.84	
2463.00	7.630	262.570	2461.04	10.18	-2.76	-40.29	40.1907922	-104.4815427	0.94	10.93	0.94	-0.01	
2558.00	9.290	264.550	2555.00	14.27	-4.31	-54.17	40.1907884	-104.4815924	1.77	-6.99	1.75	2.08	
2652.00	10.950	263.480	2647.54	19.02	-6.04	-70.60	40.1907842	-104.4816513	1.78	0.64	1.77	-1.14	
2747.00	13.470	263.600	2740.38	24.94	-8.30	-90.56	40.1907786	-104.4817228	2.65	0.72	2.65	0.13	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWP
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)		

WELLPATH DATA (183 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
2842.00	16.660	263.740	2832.10	32.15	-11.02	-115.10	40.1907719	-104.4818108	3.36	2.26	3.36	0.15	
2936.00	19.540	264.080	2921.44	40.57	-14.11	-144.14	40.1907643	-104.4819148	3.07	-6.56	3.06	0.36	
3031.00	21.140	263.570	3010.52	50.15	-17.67	-176.96	40.1907556	-104.4820325	1.69	0.00	1.68	-0.54	
3126.00	22.040	263.570	3098.85	60.43	-21.58	-211.70	40.1907459	-104.4821570	0.95	-6.20	0.95	0.00	
3221.00	23.050	263.290	3186.59	71.24	-25.75	-247.88	40.1907356	-104.4822866	1.07	1.31	1.06	-0.29	
3315.00	25.300	263.410	3272.34	82.70	-30.21	-286.12	40.1907246	-104.4824237	2.39	-63.78	2.39	0.13	
3410.00	25.370	263.080	3358.20	94.88	-34.99	-326.49	40.1907128	-104.4825683	0.17	8.23	0.07	-0.35	
3505.00	28.400	264.000	3442.93	107.52	-39.80	-369.17	40.1907009	-104.4827213	3.22	98.01	3.19	0.97	
3599.00	28.370	264.460	3525.63	120.17	-44.30	-413.63	40.1906900	-104.4828806	0.23	-110.22	-0.03	0.49	
3694.00	28.330	264.230	3609.23	132.86	-48.74	-458.52	40.1906792	-104.4830415	0.12	-8.26	-0.04	-0.24	
3789.00	28.930	264.050	3692.62	145.82	-53.39	-503.80	40.1906678	-104.4832037	0.64	5.49	0.63	-0.19	
3884.00	29.390	264.140	3775.58	159.03	-58.15	-549.85	40.1906562	-104.4833687	0.49	-146.86	0.48	0.09	
3978.00	29.330	264.060	3857.50	172.18	-62.89	-595.69	40.1906447	-104.4835330	0.08	108.37	-0.06	-0.09	
4073.00	29.280	264.370	3940.34	185.35	-67.58	-641.95	40.1906332	-104.4836987	0.17	-130.55	-0.05	0.33	
4168.00	29.110	263.960	4023.28	198.52	-72.29	-688.05	40.1906218	-104.4838639	0.28	2.51	-0.18	-0.43	
4263.00	29.560	264.000	4106.09	211.90	-77.17	-734.34	40.1906098	-104.4840298	0.47	139.10	0.47	0.04	
4357.00	29.190	264.660	4188.01	224.88	-81.72	-780.22	40.1905988	-104.4841942	0.52	158.75	-0.39	0.70	
4452.00	28.600	265.140	4271.18	237.36	-85.81	-825.94	40.1905890	-104.4843580	0.67	17.75	-0.62	0.51	
4546.00	28.690	265.200	4353.68	249.41	-89.60	-870.84	40.1905800	-104.4845189	0.10	-27.56	0.10	0.06	
4641.00	28.950	264.920	4436.91	261.74	-93.54	-916.47	40.1905706	-104.4846823	0.31	129.09	0.27	-0.29	
4736.00	28.860	265.150	4520.07	274.12	-97.52	-962.21	40.1905611	-104.4848462	0.15	145.63	-0.09	0.24	
4830.00	28.650	265.450	4602.48	286.11	-101.22	-1007.28	40.1905524	-104.4850077	0.27	-68.27	-0.22	0.32	
4925.00	28.840	264.480	4685.78	298.49	-105.23	-1052.79	40.1905428	-104.4851707	0.53	114.33	0.20	-1.02	
5020.00	28.760	264.850	4769.03	311.11	-109.49	-1098.36	40.1905325	-104.4853340	0.21	92.69	-0.08	0.39	
5114.00	28.740	265.920	4851.44	323.04	-113.13	-1143.42	40.1905240	-104.4854954	0.55	-86.73	-0.02	1.14	
5209.00	28.790	264.410	4934.72	335.26	-116.98	-1188.97	40.1905148	-104.4856586	0.77	58.55	0.05	-1.59	
5304.00	28.960	264.980	5017.91	347.90	-121.22	-1234.65	40.1905046	-104.4858223	0.34	173.68	0.18	0.60	
5398.00	28.360	265.120	5100.39	360.04	-125.11	-1279.57	40.1904954	-104.4859832	0.64	8.64	-0.64	0.15	
5493.00	28.740	265.240	5183.84	372.17	-128.93	-1324.81	40.1904863	-104.4861453	0.40	-79.39	0.40	0.13	
5588.00	28.760	265.020	5267.13	384.42	-132.81	-1370.34	40.1904771	-104.4863084	0.11	154.37	0.02	-0.23	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWP
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)		

WELLPATH DATA (183 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
5683.00	28.680	265.100	5350.44	396.71	-136.74	-1415.82	40.1904677	-104.4864713	0.09	154.61	-0.08	0.08	
5777.00	27.980	265.810	5433.18	408.43	-140.28	-1460.28	40.1904594	-104.4866306	0.83	-63.14	-0.74	0.76	
5872.00	28.580	263.420	5516.84	420.89	-144.51	-1505.09	40.1904492	-104.4867911	1.35	163.83	0.63	-2.52	
5967.00	25.320	265.640	5601.52	432.90	-148.66	-1547.93	40.1904391	-104.4869446	3.59	-0.19	-3.43	2.34	
6061.00	28.110	265.620	5685.47	443.87	-151.88	-1590.06	40.1904316	-104.4870955	2.97	43.34	2.97	-0.02	
6156.00	28.140	265.680	5769.26	455.49	-155.27	-1634.71	40.1904237	-104.4872555	0.04	-17.53	0.03	0.06	
6251.00	29.080	265.070	5852.66	467.50	-158.95	-1680.05	40.1904151	-104.4874179	1.04	103.36	0.99	-0.64	
6345.00	29.020	265.600	5934.83	479.57	-162.66	-1725.55	40.1904063	-104.4875809	0.28	-155.36	-0.06	0.56	
6440.00	28.810	265.400	6017.99	491.60	-166.26	-1771.34	40.1903978	-104.4877449	0.24	64.48	-0.22	-0.21	
6534.00	28.840	265.530	6100.34	503.49	-169.85	-1816.52	40.1903894	-104.4879068	0.07	-53.42	0.03	0.14	
6629.00	29.330	264.200	6183.36	516.08	-173.98	-1862.51	40.1903795	-104.4880716	0.85	-96.11	0.52	-1.40	
6724.00	29.330	250.210	6266.28	534.50	-184.22	-1907.60	40.1903528	-104.4882334	7.20	-67.25	0.00	-14.73	
6819.00	34.470	233.420	6347.07	566.13	-208.19	-1951.20	40.1902884	-104.4883904	10.75	-51.79	5.41	-17.67	
6913.00	42.290	220.180	6420.82	613.34	-248.33	-1993.10	40.1901795	-104.4885420	12.03	-32.51	8.32	-14.09	
7008.00	50.610	213.510	6486.26	675.14	-303.49	-2034.09	40.1900294	-104.4886909	10.12	-96.53	8.76	-7.02	
7103.00	50.160	203.490	6546.92	744.64	-367.64	-2068.94	40.1898544	-104.4888183	8.13	-17.22	-0.47	-10.55	
7198.00	56.730	201.070	6603.48	819.36	-438.24	-2097.79	40.1896615	-104.4889245	7.21	-17.90	6.92	-2.55	
7292.00	64.680	198.250	6649.45	900.26	-515.39	-2125.27	40.1894506	-104.4890260	8.85	-21.59	8.46	-3.00	
7387.00	75.020	194.060	6682.14	988.91	-600.94	-2149.94	40.1892166	-104.4891177	11.64	-87.77	10.88	-4.41	
7482.00	75.560	184.740	6706.31	1080.66	-691.49	-2164.92	40.1889685	-104.4891750	9.51	-25.41	0.57	-9.81	
7576.00	81.690	181.810	6724.85	1171.98	-783.44	-2170.16	40.1887163	-104.4891975	7.20	-10.54	6.52	-3.12	
7671.00	90.490	180.180	6731.32	1265.32	-878.10	-2171.80	40.1884565	-104.4892073	9.42	-145.01	9.26	-1.72	
7766.00	88.890	179.060	6731.83	1358.55	-973.10	-2171.17	40.1881957	-104.4892089	2.06	-43.92	-1.68	-1.18	
7861.00	89.970	178.020	6732.78	1451.42	-1068.06	-2168.75	40.1879350	-104.4892041	1.58	52.96	1.14	-1.09	
7955.00	90.370	178.550	6732.50	1543.22	-1162.01	-2165.93	40.1876770	-104.4891979	0.71	55.01	0.43	0.56	
8050.00	90.650	178.950	6731.65	1636.17	-1256.99	-2163.86	40.1874163	-104.4891943	0.51	-145.71	0.29	0.42	
8145.00	90.430	178.800	6730.76	1729.16	-1351.96	-2162.00	40.1871555	-104.4891915	0.28	158.75	-0.23	-0.16	
8240.00	90.250	178.870	6730.19	1822.13	-1446.94	-2160.06	40.1868948	-104.4891885	0.20	-65.46	-0.19	0.07	
8334.00	90.460	178.410	6729.61	1914.06	-1540.91	-2157.83	40.1866368	-104.4891843	0.54	79.38	0.22	-0.49	
8429.00	90.580	179.050	6728.75	2007.00	-1635.89	-2155.73	40.1863760	-104.4891807	0.69	-93.24	0.13	0.67	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWB
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)		

WELLPATH DATA (183 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
8524.00	90.550	178.520	6727.81	2099.96	-1730.86	-2153.71	40.1861153	-104.4891773	0.56	-78.02	-0.03	-0.56	
8618.00	90.620	178.190	6726.85	2191.79	-1824.82	-2151.02	40.1858573	-104.4891715	0.36	-88.71	0.07	-0.35	
8713.00	90.650	176.850	6725.80	2284.28	-1919.72	-2146.91	40.1855967	-104.4891607	1.41	118.00	0.03	-1.41	
8808.00	89.140	179.690	6725.97	2377.05	-2014.66	-2144.04	40.1853360	-104.4891543	3.39	-46.54	-1.59	2.99	
8903.00	91.320	177.390	6725.59	2469.92	-2109.62	-2141.62	40.1850753	-104.4891495	3.34	100.80	2.29	-2.42	
8997.00	90.710	180.580	6723.93	2561.94	-2203.58	-2139.95	40.1848173	-104.4891474	3.45	-145.94	-0.65	3.39	
9092.00	89.290	179.620	6723.93	2655.32	-2298.57	-2140.12	40.1845566	-104.4891518	1.80	-34.10	-1.49	-1.01	
9187.00	89.940	179.180	6724.57	2748.48	-2393.57	-2139.12	40.1842958	-104.4891522	0.83	70.18	0.68	-0.46	
9281.00	90.250	180.040	6724.41	2840.73	-2487.56	-2138.48	40.1840378	-104.4891537	0.97	179.44	0.33	0.91	
9376.00	89.230	180.050	6724.84	2934.10	-2582.56	-2138.56	40.1837770	-104.4891578	1.07	-79.64	-1.07	0.01	
9471.00	89.380	179.230	6725.99	3027.33	-2677.55	-2137.96	40.1835163	-104.4891596	0.88	-81.87	0.16	-0.86	
9565.00	89.510	178.320	6726.90	3119.31	-2771.52	-2135.95	40.1832583	-104.4891562	0.98	64.44	0.14	-0.97	
9660.00	90.280	179.930	6727.08	3212.38	-2866.51	-2134.50	40.1829975	-104.4891549	1.88	-45.00	0.81	1.69	
9754.00	90.400	179.810	6726.52	3304.71	-2960.51	-2134.29	40.1827395	-104.4891580	0.18	-83.58	0.13	-0.13	
9849.00	90.490	179.010	6725.78	3397.88	-3055.50	-2133.31	40.1824787	-104.4891584	0.85	105.42	0.09	-0.84	
9944.00	90.250	179.880	6725.17	3491.05	-3150.49	-2132.39	40.1822180	-104.4891589	0.95	69.20	-0.25	0.92	
10038.00	90.550	180.670	6724.51	3583.50	-3244.49	-2132.84	40.1819600	-104.4891644	0.90	-98.53	0.32	0.84	
10133.00	90.430	179.870	6723.70	3676.94	-3339.48	-2133.29	40.1816992	-104.4891699	0.85	-90.00	-0.13	-0.84	
10228.00	90.430	179.460	6722.99	3770.18	-3434.48	-2132.73	40.1814385	-104.4891718	0.43	52.70	0.00	-0.43	
10322.00	92.370	182.010	6720.69	3862.73	-3528.43	-2133.94	40.1811806	-104.4891799	3.41	-130.72	2.06	2.71	
10417.00	89.750	178.970	6718.93	3956.20	-3623.39	-2134.75	40.1809200	-104.4891867	4.22	63.89	-2.76	-3.20	
10511.00	90.250	179.990	6718.93	4048.41	-3717.38	-2133.90	40.1806620	-104.4891875	1.21	43.60	0.53	1.09	
10606.00	90.460	180.190	6718.34	4141.79	-3812.38	-2134.05	40.1804012	-104.4891919	0.31	131.63	0.22	0.21	
10701.00	90.220	180.460	6717.78	4235.24	-3907.38	-2134.58	40.1801405	-104.4891977	0.38	29.05	-0.25	0.28	
10796.00	90.490	180.610	6717.19	4328.75	-4002.37	-2135.47	40.1798798	-104.4892047	0.33	-57.65	0.28	0.16	
10890.00	90.680	180.310	6716.23	4421.26	-4096.37	-2136.23	40.1796218	-104.4892113	0.38	-117.72	0.20	-0.32	
10985.00	90.370	179.720	6715.36	4514.61	-4191.36	-2136.25	40.1793611	-104.4892152	0.70	108.82	-0.33	-0.62	
11080.00	90.220	180.160	6714.87	4607.95	-4286.36	-2136.15	40.1791003	-104.4892187	0.49	76.33	-0.16	0.46	
11174.00	90.310	180.530	6714.44	4700.42	-4380.36	-2136.72	40.1788423	-104.4892246	0.41	-45.00	0.10	0.39	
11269.00	90.430	180.410	6713.82	4793.92	-4475.35	-2137.50	40.1785816	-104.4892313	0.18	-32.47	0.13	-0.13	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWB
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)		

WELLPATH DATA (183 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
11364.00	90.650	180.270	6712.93	4887.37	-4570.35	-2138.06	40.1783209	-104.4892372	0.27	66.80	0.23	-0.15	
11458.00	90.770	180.550	6711.76	4979.86	-4664.34	-2138.73	40.1780629	-104.4892434	0.32	-120.16	0.13	0.30	
11553.00	90.340	179.810	6710.84	5073.26	-4759.33	-2139.03	40.1778022	-104.4892483	0.90	170.79	-0.45	-0.78	
11648.00	89.970	179.870	6710.59	5166.57	-4854.33	-2138.77	40.1775414	-104.4892513	0.39	-15.64	-0.39	0.06	
11742.00	90.220	179.800	6710.43	5258.89	-4948.33	-2138.50	40.1772834	-104.4892541	0.28	-149.42	0.27	-0.07	
11837.00	90.000	179.670	6710.25	5352.16	-5043.33	-2138.06	40.1770226	-104.4892564	0.27	37.92	-0.23	-0.14	
12026.00	90.770	180.270	6708.98	5537.86	-5232.32	-2137.96	40.1765039	-104.4892638	0.52	-174.51	0.41	0.32	
12121.00	90.250	180.220	6708.13	5631.29	-5327.32	-2138.36	40.1762431	-104.4892691	0.55	-45.00	-0.55	-0.05	
12215.00	90.800	179.670	6707.27	5723.64	-5421.31	-2138.27	40.1759851	-104.4892726	0.83	69.31	0.59	-0.59	
12310.00	91.170	180.650	6705.64	5817.03	-5516.29	-2138.54	40.1757244	-104.4892774	1.10	-154.16	0.39	1.03	
12404.00	90.220	180.190	6704.50	5909.52	-5610.28	-2139.23	40.1754665	-104.4892837	1.12	-85.13	-1.01	-0.49	
12499.00	90.430	177.720	6703.96	6002.53	-5705.26	-2137.49	40.1752057	-104.4892814	2.61	66.44	0.22	-2.60	
12594.00	90.770	178.500	6702.96	6095.24	-5800.20	-2134.36	40.1749450	-104.4892741	0.90	-98.53	0.36	0.82	
12689.00	90.310	175.440	6702.07	6187.52	-5895.05	-2129.34	40.1746845	-104.4892600	3.26	38.88	-0.48	-3.22	
12783.00	90.620	175.690	6701.31	6278.27	-5988.77	-2122.07	40.1744271	-104.4892378	0.42	170.79	0.33	0.27	
12878.00	89.510	175.870	6701.20	6370.07	-6083.51	-2115.08	40.1741668	-104.4892166	1.18	59.49	-1.17	0.19	
12973.00	90.830	178.110	6700.92	6462.37	-6178.37	-2110.09	40.1739063	-104.4892027	2.74	107.04	1.39	2.36	
13067.00	90.180	180.230	6700.09	6554.47	-6272.35	-2108.73	40.1736483	-104.4892016	2.36	-60.14	-0.69	2.26	
13162.00	90.800	179.150	6699.28	6647.72	-6367.34	-2108.22	40.1733875	-104.4892037	1.31	-153.78	0.65	-1.14	
13257.00	89.480	178.500	6699.04	6740.69	-6462.32	-2106.27	40.1731267	-104.4892006	1.55	-57.45	-1.39	-0.68	
13351.00	89.780	178.030	6699.65	6832.49	-6556.28	-2103.42	40.1728688	-104.4891942	0.59	58.75	0.32	-0.50	
13446.00	90.490	179.200	6699.43	6925.39	-6651.24	-2101.13	40.1726080	-104.4891899	1.44	-143.86	0.75	1.23	
13540.00	89.600	178.550	6699.35	7017.40	-6745.23	-2099.28	40.1723500	-104.4891871	1.17	29.49	-0.95	-0.69	
13635.00	91.050	179.370	6698.81	7110.42	-6840.20	-2097.56	40.1720892	-104.4891848	1.75	-120.51	1.53	0.86	
13730.00	90.490	178.420	6697.54	7203.41	-6935.18	-2095.73	40.1718285	-104.4891821	1.16	39.79	-0.59	-1.00	
13824.00	91.690	179.420	6695.75	7295.41	-7029.14	-2093.95	40.1715705	-104.4891796	1.66	119.98	1.28	1.06	
13919.00	91.390	179.940	6693.20	7388.64	-7124.10	-2093.42	40.1713099	-104.4891816	0.63	-95.71	-0.32	0.55	
14014.00	91.350	179.540	6690.92	7481.88	-7219.08	-2092.99	40.1710492	-104.4891839	0.42	-11.76	-0.04	-0.42	
14108.00	92.310	179.340	6687.92	7574.03	-7313.02	-2092.08	40.1707913	-104.4891845	1.04	-176.28	1.02	-0.21	
14202.00	91.080	179.260	6685.14	7666.14	-7406.97	-2090.93	40.1705334	-104.4891842	1.31	90.00	-1.31	-0.09	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWB
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)		

WELLPATH DATA (183 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
14297.00	91.080	179.710	6683.35	7759.32	-7501.95	-2090.07	40.1702726	-104.4891850	0.47	120.70	0.00	0.47	
14391.00	90.890	180.030	6681.74	7851.64	-7595.94	-2089.86	40.1700146	-104.4891881	0.40	-140.39	-0.20	0.34	
14486.00	90.310	179.550	6680.74	7944.92	-7690.93	-2089.51	40.1697539	-104.4891907	0.79	-130.60	-0.61	-0.51	
14580.00	90.250	179.480	6680.28	8037.14	-7784.93	-2088.72	40.1694959	-104.4891917	0.10	48.58	-0.06	-0.07	
14675.00	90.550	179.820	6679.62	8130.38	-7879.92	-2088.14	40.1692351	-104.4891935	0.48	-124.31	0.32	0.36	
14769.00	89.970	178.970	6679.19	8222.57	-7973.91	-2087.14	40.1689771	-104.4891938	1.09	73.30	-0.62	-0.90	
14864.00	90.180	179.670	6679.07	8315.70	-8068.91	-2086.02	40.1687163	-104.4891936	0.77	156.04	0.22	0.74	
14959.00	90.000	179.750	6678.92	8408.97	-8163.91	-2085.54	40.1684555	-104.4891958	0.21	-35.36	-0.19	0.08	
15053.00	90.310	179.530	6678.66	8501.23	-8257.90	-2084.94	40.1681975	-104.4891975	0.40	75.12	0.33	-0.23	
15148.00	90.650	180.810	6677.87	8594.63	-8352.90	-2085.23	40.1679368	-104.4892024	1.39	-104.60	0.36	1.35	
15243.00	90.220	179.160	6677.15	8687.97	-8447.89	-2085.20	40.1676760	-104.4892062	1.79	99.58	-0.45	-1.74	
15337.00	90.090	179.930	6676.89	8780.20	-8541.89	-2084.46	40.1674180	-104.4892073	0.83	-76.70	-0.14	0.82	
15432.00	90.220	179.380	6676.64	8873.45	-8636.88	-2083.88	40.1671572	-104.4892092	0.59	102.34	0.14	-0.58	
15527.00	90.150	179.700	6676.33	8966.66	-8731.88	-2083.12	40.1668965	-104.4892103	0.34	-86.88	-0.07	0.34	
15622.00	90.180	179.150	6676.06	9059.83	-8826.88	-2082.17	40.1666357	-104.4892108	0.58	90.00	0.03	-0.58	
15717.00	90.180	179.220	6675.76	9152.93	-8921.87	-2080.82	40.1663749	-104.4892098	0.07	101.69	0.00	0.07	
15811.00	90.120	179.510	6675.51	9245.10	-9015.86	-2079.77	40.1661169	-104.4892099	0.32	-56.98	-0.06	0.31	
15906.00	90.250	179.310	6675.20	9338.27	-9110.85	-2078.80	40.1658561	-104.4892103	0.25	-157.93	0.14	-0.21	
16001.00	89.880	179.160	6675.10	9431.38	-9205.84	-2077.53	40.1655953	-104.4892096	0.42	45.00	-0.39	-0.16	
16096.00	90.220	179.500	6675.01	9524.52	-9300.84	-2076.42	40.1653346	-104.4892095	0.51	-101.48	0.36	0.36	
16190.00	90.090	178.860	6674.76	9616.64	-9394.83	-2075.07	40.1650765	-104.4892085	0.69	56.31	-0.14	-0.68	
16285.00	90.310	179.190	6674.43	9709.68	-9489.81	-2073.45	40.1648158	-104.4892066	0.42	-132.09	0.23	0.35	
16380.00	90.030	178.880	6674.15	9802.72	-9584.80	-2071.85	40.1645550	-104.4892048	0.44	92.77	-0.29	-0.33	
16569.00	90.000	179.500	6674.10	9987.93	-9773.78	-2069.18	40.1640362	-104.4892029	0.33	45.97	-0.02	0.33	
16664.00	90.580	180.100	6673.62	10081.23	-9868.78	-2068.85	40.1637754	-104.4892056	0.88	-159.72	0.61	0.63	
16758.00	90.120	179.930	6673.04	10173.60	-9962.77	-2068.88	40.1635174	-104.4892095	0.52	-27.90	-0.49	-0.18	
16853.00	90.800	179.570	6672.28	10266.87	-10057.77	-2068.46	40.1632567	-104.4892119	0.81	133.19	0.72	-0.38	
16947.00	90.340	180.060	6671.34	10359.18	-10151.76	-2068.16	40.1629987	-104.4892147	0.71	-67.54	-0.49	0.52	
17136.00	90.650	179.310	6669.71	10544.71	-10340.75	-2067.12	40.1624799	-104.4892187	0.43	113.38	0.16	-0.40	
17231.00	90.490	179.680	6668.77	10637.90	-10435.74	-2066.28	40.1622191	-104.4892196	0.42	168.06	-0.17	0.39	

TARGETS



Actual Wellpath Report

GUTTERSEN YY06 -785 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWB
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)		

WELLPATH COMPOSITION - Ref Wellbore: GUTTERSEN YY06 -785 AWB Ref Wellpath: GUTTERSEN YY06 -785 AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1918.00	Gyrodatta 2015 - GC+DROP+COND	Gyrodatta 2015 - GC+DROP+COND 13-1/2" <80 - 1918>	GUTTERSEN YY06 -785 AWB	7/27/2020
1918.00	17514.00	OWSG MWD rev2 (MS+IFR1) NOBLE	OWSG MWD Rev2 (MS+IFR1) NOBLE 8-1/2" <2085 - 17420>	GUTTERSEN YY06 -785 AWB	7/27/2020



Actual Wellpath Report

GUTTERSEN YY06 -785 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN YY06 -785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.30-T03N-R63W	Wellbore	GUTTERSEN YY06 -785 AWB
Slot	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
80.00	0.450	15.640	80.00	FIRST GYRODATA SURVEY
1918.00	0.250	20.120	1917.98	LAST GYRODATA SURVEY
2085.00	2.800	262.300	2084.91	FIRST BH MWD SURVEY
17420.00	90.060	180.190	6668.36	LAST BH MWD SURVEY
17514.00	90.060	180.190	6668.26	PROJECTION TO BIT