

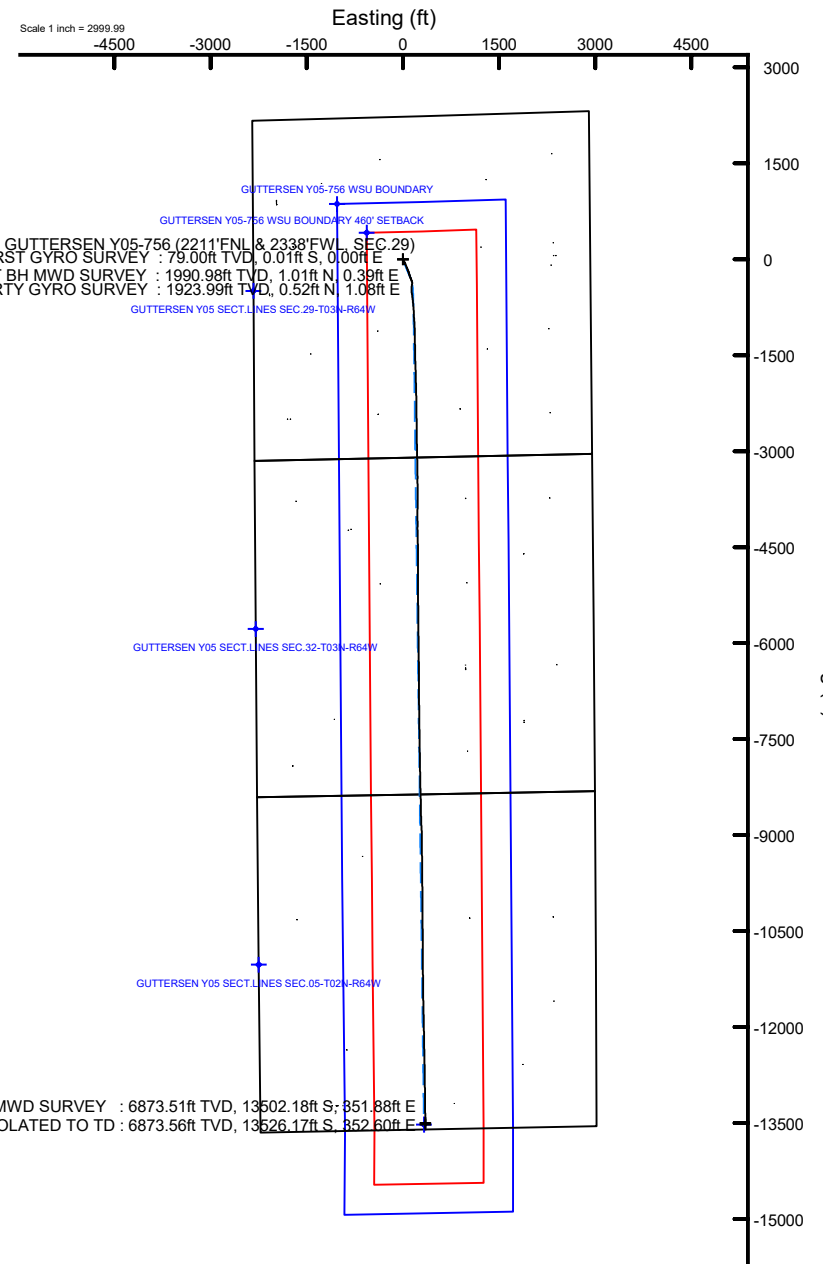
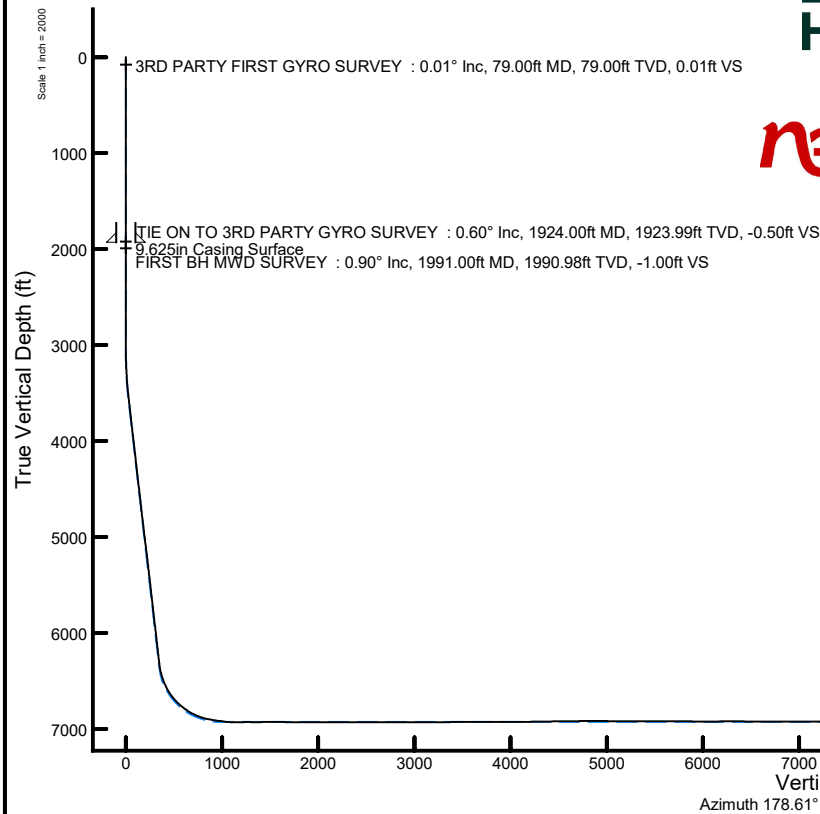
# NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#37 GUTTERSEN Y05-756 (2211°FNL & 2338°FWL, SEC.29)  
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GUTTERSEN Y05-756  
Facility: SEC.29-T03N-R64W Wellbore: GUTTERSEN Y05-756 AWB

## Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.29-T03N-R64W				3256078.619	1317026.618	40°12'0.0040"N	104°34'59.6280"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#37 GUTTERSEN Y05-756 (2211°FNL & 2338°FWL, SEC.29)	-898.14	1971.72	3258050.249	1316128.522	40°11'50.9269"N	104°34'34.3398"W	
H&P 321 (4780'GL+30'KB@4810') (RKB) to Mud line (At Slot: SLOT#37 GUTTERSEN Y05-756 (2211°FNL & 2338°FWL, SEC.29))						4810ft	
Mean Sea Level to Mud line (At Slot: SLOT#37 GUTTERSEN Y05-756 (2211°FNL & 2338°FWL, SEC.29))						0ft	
H&P 321 (4780'GL+30'KB@4810') (RKB) to Mean Sea Level						4810ft	

Plot reference wellpath is GUTTERSEN Y05-756 AWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to H&P 321 (4780'GL+30'KB@4810') (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 321 (4780'GL+30'KB@4810') (RKB)	Scale: True distance
H&P 321 (4780'GL+30'KB@4810') (RKB) to Mean Sea Level: 4810 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Mud line (At Slot: SLOT#37 GUTTERSEN Y05-756 (2211°FNL & 2338°FWL, SEC.29)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: manojh on 2020-01-20; Database: WA_NOBLE



## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN Y05-756
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-48046
Facility	SEC.29-T03N-R64W	Wellbore	GUTTERSEN Y05-756 AWB
Slot	SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29)		

## 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 1:39:43 PM
Convergence at slot	0.60° 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	-898.14	1971.72	3258050.25	1316128.52	40°11'50.9269"N	104°34'34.3398"W
Facility Reference Pt			3256078.62	1317026.62	40°12'0.0040"N	104°34'59.6280"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 321 (4780'GL+30'KB@4810') (RKB) to Facility Vertical Datum	4810.00ft
Horizontal Reference Pt	Slot	H&P 321 (4780'GL+30'KB@4810') (RKB) to Mean Sea Level	4810.00ft
Vertical Reference Pt	H&P 321 (4780'GL+30'KB@4810') (RKB)	H&P 321 (4780'GL+30'KB@4810') (RKB) to Mud Line at Slot (SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29))	4810.00ft
MD Reference Pt	H&P 321 (4780'GL+30'KB@4810') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	178.61°

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN Y05-756
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-48046
Facility	SEC.29-T03N-R64W	Wellbore	GUTTERSEN Y05-756 AWB
Slot	SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29)		

### WELLPATH DATA (201 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	TVDSS [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
0.00	0.000	139.650	0.00	-4810.00	0.00	0.00	0.00	40°11'50.9269"N	104°34'34.3398"W	0.00	0.00	0.00	0.00	
79.00	0.010	139.650	79.00	-4731.00	0.01	-0.01	0.00	40°11'50.9268"N	104°34'34.3397"W	0.01	-99.62	0.01	0.00	3RD PARTY FIRST GYRO SURVEY
176.00	0.370	41.560	176.00	-4634.00	-0.22	0.22	0.22	40°11'50.9291"N	104°34'34.3370"W	0.38	-118.50	0.37	-101.12	
268.00	0.330	3.230	268.00	-4542.00	-0.70	0.71	0.43	40°11'50.9339"N	104°34'34.3342"W	0.25	137.21	-0.04	-41.66	
362.00	0.260	80.880	362.00	-4448.00	-1.00	1.01	0.66	40°11'50.9368"N	104°34'34.3312"W	0.40	-158.59	-0.07	82.61	
456.00	0.100	353.930	456.00	-4354.00	-1.11	1.13	0.86	40°11'50.9380"N	104°34'34.3286"W	0.29	162.76	-0.17	-92.50	
551.00	0.250	149.880	551.00	-4259.00	-1.01	1.03	0.95	40°11'50.9370"N	104°34'34.3274"W	0.36	-114.61	0.16	164.16	
645.00	0.280	89.540	645.00	-4165.00	-0.83	0.86	1.29	40°11'50.9352"N	104°34'34.3231"W	0.28	-171.34	0.03	-64.19	
740.00	0.140	80.670	739.99	-4070.01	-0.84	0.88	1.63	40°11'50.9354"N	104°34'34.3187"W	0.15	-22.65	-0.15	-9.34	
834.00	0.260	69.990	833.99	-3976.01	-0.92	0.97	1.95	40°11'50.9363"N	104°34'34.3146"W	0.13	153.85	0.13	-11.36	
929.00	0.120	116.590	928.99	-3881.01	-0.94	1.00	2.24	40°11'50.9365"N	104°34'34.3108"W	0.21	116.08	-0.15	49.05	
1023.00	0.170	193.320	1022.99	-3787.01	-0.76	0.82	2.29	40°11'50.9347"N	104°34'34.3101"W	0.20	-167.90	0.05	81.63	
1118.00	0.070	56.030	1117.99	-3692.01	-0.66	0.71	2.31	40°11'50.9337"N	104°34'34.3100"W	0.24	158.45	-0.11	-144.52	
1212.00	0.140	203.900	1211.99	-3598.01	-0.58	0.64	2.31	40°11'50.9330"N	104°34'34.3099"W	0.22	-152.11	0.07	157.31	
1307.00	0.070	162.480	1306.99	-3503.01	-0.42	0.48	2.28	40°11'50.9314"N	104°34'34.3104"W	0.10	-75.46	-0.07	-43.60	
1402.00	0.190	107.910	1401.99	-3408.01	-0.32	0.38	2.45	40°11'50.9304"N	104°34'34.3082"W	0.17	157.21	0.13	-57.44	
1496.00	0.080	198.190	1495.99	-3314.01	-0.20	0.27	2.58	40°11'50.9293"N	104°34'34.3066"W	0.22	134.35	-0.12	96.04	
1590.00	0.230	318.140	1589.99	-3220.01	-0.28	0.34	2.43	40°11'50.9300"N	104°34'34.3085"W	0.30	170.83	0.16	127.61	
1685.00	0.110	328.440	1684.99	-3125.01	-0.51	0.56	2.25	40°11'50.9322"N	104°34'34.3107"W	0.13	-109.06	-0.13	10.84	
1779.00	0.200	250.700	1778.99	-3031.01	-0.54	0.59	2.05	40°11'50.9325"N	104°34'34.3133"W	0.22	20.63	0.10	-82.70	
1874.00	0.450	262.320	1873.99	-2936.01	-0.44	0.48	1.53	40°11'50.9315"N	104°34'34.3201"W	0.27	65.69	0.26	12.23	
1924.00	0.600	284.890	1923.99	-2886.01	-0.50	0.52	1.08	40°11'50.9319"N	104°34'34.3258"W	0.51	73.64	0.30	45.14	TIE ON TO 3RD PARTY GYRO SURVEY
1991.00	0.900	318.760	1990.98	-2819.02	-1.00	1.01	0.39	40°11'50.9368"N	104°34'34.3346"W	0.78	-179.51	0.45	50.55	FIRST BH MWD SURVEY
2085.00	0.130	142.680	2084.98	-2725.02	-1.48	1.48	-0.03	40°11'50.9415"N	104°34'34.3400"W	1.10	122.23	-0.82	-187.32	
2180.00	0.110	176.160	2179.98	-2630.02	-1.30	1.30	0.04	40°11'50.9398"N	104°34'34.3391"W	0.08	33.43	-0.02	35.24	
2274.00	0.250	195.560	2273.98	-2536.02	-1.01	1.01	-0.01	40°11'50.9369"N	104°34'34.3398"W	0.16	148.93	0.15	20.64	
2369.00	0.140	277.330	2368.98	-2441.02	-0.83	0.83	-0.18	40°11'50.9351"N	104°34'34.3420"W	0.28	124.28	-0.12	86.07	
2463.00	0.180	1.620	2462.98	-2347.02	-1.00	0.99	-0.29	40°11'50.9367"N	104°34'34.3434"W	0.23	128.60	0.04	89.67	
2558.00	0.330	104.990	2557.98	-2252.02	-1.07	1.07	-0.02	40°11'50.9375"N	104°34'34.3399"W	0.43	139.30	0.16	108.81	
2652.00	0.280	194.070	2651.98	-2158.02	-0.77	0.78	0.19	40°11'50.9346"N	104°34'34.3373"W	0.46	130.99	-0.05	94.77	
2747.00	0.390	292.250	2746.98	-2063.02	-0.68	0.67	-0.17	40°11'50.9336"N	104°34'34.3419"W	0.54	146.39	0.12	103.35	
2841.00	0.600	57.560	2840.97	-1969.03	-1.06	1.06	-0.05	40°11'50.9374"N	104°34'34.3403"W	0.94	163.72	0.22	133.31	
2936.00	0.670	206.740	2935.97	-1874.03	-0.83	0.83	0.12	40°11'50.9351"N	104°34'34.3381"W	1.29	-173.62	0.07	157.03	
3030.00	1.030	37.270	3029.97	-1780.03	-1.00	1.01	0.38	40°11'50.9369"N	104°34'34.3347"W	1.80	158.15	0.38	-180.29	
3125.00	0.870	169.280	3124.96	-1685.04	-0.96	0.98	1.04	40°11'50.9365"N	104°34'34.3263"W	1.83	-24.58	-0.17	138.96	
3219.00	3.090	151.420	3218.90	-1591.10	2.00	-1.94	2.38	40°11'50.9074"N	104°34'34.3094"W	2.42	-6.48	2.36	-19.00	
3313.00	3.930	150.030	3312.72	-1497.28	7.08	-6.96	5.20	40°11'50.8576"N	104°34'34.2737"W	0.90	-7.59	0.89	-1.48	
3407.00	4.730	148.740	3406.45	-1403.55	13.27	-13.06	8.82	40°11'50.7969"N	104°34'34.2279"W	0.86	15.03	0.85	-1.37	
3502.00	6.940	153.600	3500.96	-1309.04	21.87	-21.55	13.41	40°11'50.7125"N	104°34'34.1699"W	2.38	109.29	2.33	5.12	
3596.00	6.920	154.080	3594.27	-1215.73	32.17	-31.73	18.41	40°11'50.6114"N	104°34'34.1069"W	0.07	30.28	-0.02	0.51	
3691.00	7.040	154.650	3688.57	-1121.43	42.70	-42.14	23.40	40°11'50.5081"N	104°34'34.0439"W	0.15	103.01	0.13	0.60	
3785.00	7.010	155.760	3781.86	-1028.14	53.25	-52.58	28.22	40°11'50.4045"N	104°34'33.9832"W	0.15	-13.25	-0.03	1.18	
3880.00	7.330	155.170	3876.12	-933.88	64.15	-63.36	33.15	40°11'50.2974"N	104°34'33.9212"W	0.35	-141.00	0.34	-0.62	
3975.00	7.260	154.720	3970.35	-839.65	75.20	-74.29	38.26	40°11'50.1889"N	104°34'33.8568"W	0.10	162.62	-0.07	-0.47	
4069.00	7.060	155.230	4063.61	-746.39	85.93	-84.91	43.21	40°11'50.0834"N	104°34'33.7944"W	0.22	99.85	-0.21	0.54	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN Y05-756
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-48046
Facility	SEC.29-T03N-R64W	Wellbore	GUTTERSEN Y05-756 AWB
Slot	SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29)		

### WELLPATH DATA (201 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	TVDSS [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toolface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
4164.00	7.000	158.650	4157.90	-652.10	96.73	-95.60	47.77	40°11'49.9773"N	104°34'33.7371"W	0.45	-164.27	-0.06	3.60	
4258.00	6.730	158.000	4251.23	-558.77	107.27	-106.04	51.92	40°11'49.8737"N	104°34'33.6851"W	0.30	31.80	-0.29	-0.69	
4353.00	6.830	158.520	4345.56	-464.44	117.79	-116.46	56.07	40°11'49.7703"N	104°34'33.6329"W	0.12	-20.52	0.11	0.55	
4448.00	7.040	157.880	4439.87	-370.13	128.54	-127.11	60.33	40°11'49.6647"N	104°34'33.5795"W	0.24	2.97	0.22	-0.67	
4542.00	7.160	157.930	4533.15	-276.85	139.41	-137.87	64.70	40°11'49.5578"N	104°34'33.5246"W	0.13	177.94	0.13	0.05	
4637.00	6.830	158.030	4627.44	-182.56	150.23	-148.60	69.04	40°11'49.4514"N	104°34'33.4701"W	0.35	51.23	-0.35	0.11	
4731.00	6.940	159.150	4720.76	-89.24	160.82	-159.09	73.15	40°11'49.3473"N	104°34'33.4185"W	0.18	-55.49	0.12	1.19	
4826.00	7.090	157.420	4815.05	5.05	171.70	-169.87	77.44	40°11'49.2404"N	104°34'33.3647"W	0.27	95.22	0.16	-1.82	
4921.00	7.080	158.400	4909.33	99.33	182.66	-180.72	81.85	40°11'49.1327"N	104°34'33.3093"W	0.13	-35.77	-0.01	1.03	
5015.00	7.640	155.420	5002.55	192.55	193.84	-191.79	86.58	40°11'49.0228"N	104°34'33.2498"W	0.72	93.84	0.60	-3.17	
5110.00	7.640	163.160	5096.71	286.71	205.73	-203.58	91.04	40°11'48.9059"N	104°34'33.1940"W	1.08	127.93	0.00	8.15	
5204.00	6.940	171.370	5189.95	379.95	217.39	-215.18	93.70	40°11'48.7910"N	104°34'33.1613"W	1.33	-111.66	-0.74	8.73	
5299.00	6.540	159.240	5284.30	474.30	228.19	-225.91	96.48	40°11'48.6846"N	104°34'33.1269"W	1.55	-3.97	-0.42	-12.77	
5394.00	7.190	158.880	5378.62	568.62	238.89	-236.51	100.54	40°11'48.5794"N	104°34'33.0760"W	0.69	166.14	0.68	-0.38	
5488.00	6.820	159.650	5471.92	661.92	249.70	-247.23	104.60	40°11'48.4731"N	104°34'33.0251"W	0.41	97.23	-0.39	0.82	
5582.00	6.830	174.850	5565.26	755.26	260.56	-258.04	107.04	40°11'48.3661"N	104°34'32.9951"W	1.92	-106.29	0.01	16.17	
5677.00	6.560	156.140	5659.62	849.62	271.21	-268.63	109.75	40°11'48.2612"N	104°34'32.9617"W	2.30	21.08	-0.28	-19.69	
5771.00	7.060	157.700	5752.96	942.96	281.57	-278.88	114.11	40°11'48.1594"N	104°34'32.9068"W	0.57	-104.81	0.53	1.66	
5866.00	7.040	157.070	5847.24	1037.24	292.44	-289.64	118.59	40°11'48.0526"N	104°34'32.8505"W	0.08	137.69	-0.02	-0.66	
5960.00	6.900	158.140	5940.55	1130.55	303.09	-300.19	122.94	40°11'47.9479"N	104°34'32.7959"W	0.20	148.23	-0.15	1.14	
6054.00	6.850	158.400	6033.87	1223.87	313.64	-310.64	127.11	40°11'47.8442"N	104°34'32.7436"W	0.06	5.34	-0.05	0.28	
6149.00	6.980	158.500	6128.18	1318.18	324.38	-321.28	131.31	40°11'47.7387"N	104°34'32.6909"W	0.14	10.08	0.14	0.11	
6244.00	7.070	158.630	6222.47	1412.47	335.29	-332.10	135.55	40°11'47.6314"N	104°34'32.6377"W	0.10	152.85	0.09	0.14	
6338.00	7.020	158.840	6315.76	1505.76	346.13	-342.84	139.73	40°11'47.5248"N	104°34'32.5852"W	0.06	20.65	-0.05	0.22	
6433.00	13.140	168.700	6409.25	1599.25	362.25	-358.86	143.95	40°11'47.3660"N	104°34'32.5330"W	6.67	42.17	6.44	10.38	
6527.00	20.920	186.290	6499.12	1689.12	389.47	-386.08	144.21	40°11'47.0971"N	104°34'32.5334"W	9.84	13.19	8.28	18.71	
6622.00	28.670	190.040	6585.30	1775.30	428.67	-425.44	138.37	40°11'46.7087"N	104°34'32.6140"W	8.32	-39.62	8.16	3.95	
6716.00	37.950	178.380	6663.85	1853.85	479.84	-476.70	135.24	40°11'46.2025"N	104°34'32.6611"W	11.96	-30.39	9.87	-12.40	
6811.00	46.560	171.620	6734.14	1924.14	543.44	-540.17	141.11	40°11'45.5747"N	104°34'32.5940"W	10.24	7.00	9.06	-7.12	
6905.00	54.180	172.770	6794.05	1984.05	615.33	-611.85	150.89	40°11'44.8654"N	104°34'32.4776"W	8.16	7.65	8.11	1.22	
7000.00	62.610	174.040	6843.79	2033.79	695.84	-692.15	160.14	40°11'44.0710"N	104°34'32.3692"W	8.95	9.95	8.87	1.34	
7094.00	71.580	175.690	6880.34	2070.34	782.15	-778.30	167.84	40°11'43.2188"N	104°34'32.2816"W	9.68	18.94	9.54	1.76	
7189.00	80.910	178.910	6902.91	2092.91	874.29	-870.36	172.13	40°11'42.3087"N	104°34'32.2387"W	10.36	-82.56	9.82	3.39	
7284.00	81.500	174.540	6917.44	2107.44	968.10	-964.07	177.49	40°11'41.3822"N	104°34'32.1821"W	4.59	46.05	0.62	-4.60	
7378.00	85.100	178.270	6928.41	2118.41	1061.36	-1057.21	183.33	40°11'40.4612"N	104°34'32.1194"W	5.49	12.21	3.83	3.97	
7473.00	91.720	179.700	6931.05	2121.05	1156.26	-1152.11	185.01	40°11'39.5234"N	104°34'32.1105"W	7.13	-149.94	6.97	1.51	
7567.00	89.940	178.670	6929.68	2119.68	1250.24	-1246.08	186.35	40°11'38.5946"N	104°34'32.1059"W	2.19	-107.82	-1.89	-1.10	
7662.00	89.850	178.390	6929.86	2119.86	1345.24	-1341.05	188.78	40°11'37.6559"N	104°34'32.0873"W	0.31	-8.60	-0.09	-0.29	
7756.00	90.710	178.260	6929.40	2119.40	1439.24	-1435.01	191.53	40°11'36.7272"N	104°34'32.0645"W	0.93	106.14	0.91	-0.14	
7851.00	90.180	180.090	6928.66	2118.66	1534.23	-1529.99	192.90	40°11'35.7885"N	104°34'32.0596"W	2.01	-114.42	-0.56	1.93	
7945.00	88.950	177.380	6929.38	2119.38	1628.21	-1623.95	194.97	40°11'34.8598"N	104°34'32.0455"W	3.17	48.37	-1.31	-2.88	
8040.00	89.910	178.460	6930.32	2120.32	1723.20	-1718.88	198.42	40°11'33.9214"N	104°34'32.0138"W	1.52	1.17	1.01	1.14	
8135.00	90.400	178.470	6930.06	2120.06	1818.20	-1813.85	200.97	40°11'32.9827"N	104°34'31.9938"W	0.52	160.91	0.52	0.01	
8229.00	89.880	178.650	6929.83	2119.83	1912.20	-1907.82	203.33	40°11'32.0539"N	104°34'31.9760"W	0.59	168.11	-0.55	0.19	
8323.00	89.690	178.690	6930.19	2120.19	2006.20	-2001.79	205.51	40°11'31.1251"N	104°34'31.9605"W	0.21	-42.88	-0.20	0.04	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN Y05-756
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-48046
Facility	SEC.29-T03N-R64W	Wellbore	GUTTERSEN Y05-756 AWB
Slot	SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29)		

### WELLPATH DATA (201 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
8418.00	89.970	178.430	6930.47	2120.47	2101.20	-2096.76	207.90	40°11'30.1864"N	104°34'31.9425"W	0.40	73.41	0.29	-0.27	
8513.00	90.250	179.370	6930.29	2120.29	2196.19	-2191.74	209.72	40°11'29.2477"N	104°34'31.9317"W	1.03	174.81	0.29	0.99	
8702.00	90.030	179.390	6929.82	2119.82	2385.18	-2380.73	211.77	40°11'27.3800"N	104°34'31.9308"W	0.12	-127.70	-0.12	0.01	
8797.00	89.350	178.510	6930.34	2120.34	2480.17	-2475.71	213.51	40°11'26.4413"N	104°34'31.9211"W	1.17	-32.62	-0.72	-0.93	
8891.00	89.600	178.350	6931.20	2121.20	2574.17	-2569.67	216.08	40°11'25.5125"N	104°34'31.9006"W	0.32	71.62	0.27	-0.17	
8986.00	90.590	181.330	6931.04	2121.04	2669.13	-2664.66	216.35	40°11'24.5739"N	104°34'31.9099"W	3.31	-135.00	1.04	3.14	
9081.00	89.260	180.000	6931.17	2121.17	2764.07	-2759.65	215.25	40°11'23.6354"N	104°34'31.9369"W	1.98	-76.99	-1.40	-1.40	
9175.00	89.880	177.320	6931.87	2121.87	2858.05	-2853.61	217.44	40°11'22.7067"N	104°34'31.9212"W	2.93	75.86	0.66	-2.85	
9269.00	90.590	180.140	6931.49	2121.49	2952.04	-2947.58	219.53	40°11'21.7779"N	104°34'31.9069"W	3.09	-145.78	0.76	3.00	
9364.00	90.090	179.800	6930.92	2120.92	3047.01	-3042.58	219.58	40°11'20.8392"N	104°34'31.9191"W	0.64	-88.87	-0.53	-0.36	
9458.00	90.180	175.210	6930.70	2120.70	3140.97	-3136.46	223.67	40°11'19.9111"N	104°34'31.8790"W	4.88	104.45	0.10	-4.88	
9553.00	88.710	180.920	6931.62	2121.62	3235.92	-3231.36	226.87	40°11'18.9730"N	104°34'31.8504"W	6.21	-39.52	-1.55	6.01	
9648.00	91.910	178.280	6931.11	2121.11	3330.88	-3326.34	227.54	40°11'18.0344"N	104°34'31.8546"W	4.37	119.96	3.37	-2.78	
9742.00	90.710	180.360	6928.96	2118.96	3424.85	-3420.30	228.65	40°11'17.1058"N	104°34'31.8529"W	2.55	-140.90	-1.28	2.21	
9837.00	89.910	179.710	6928.44	2118.44	3519.81	-3515.30	228.59	40°11'16.1671"N	104°34'31.8664"W	1.09	63.44	-0.84	-0.68	
9931.00	89.940	179.770	6928.57	2118.57	3613.80	-3609.30	229.02	40°11'15.2382"N	104°34'31.8735"W	0.07	-46.33	0.03	0.06	
10026.00	90.150	179.550	6928.49	2118.49	3708.78	-3704.29	229.58	40°11'14.2994"N	104°34'31.8790"W	0.32	104.55	0.22	-0.23	
10120.00	89.880	180.590	6928.47	2118.47	3802.75	-3798.29	229.47	40°11'13.3706"N	104°34'31.8931"W	1.14	-62.65	-0.29	1.11	
10215.00	90.030	180.300	6928.54	2118.54	3897.70	-3893.29	228.73	40°11'12.4320"N	104°34'31.9154"W	0.34	62.08	0.16	-0.31	
10309.00	90.920	181.980	6927.76	2117.76	3991.60	-3987.26	226.86	40°11'11.5036"N	104°34'31.9521"W	2.02	-109.34	0.95	1.79	
10404.00	89.080	176.740	6927.76	2117.76	4086.55	-4082.22	227.92	40°11'10.5651"N	104°34'31.9512"W	5.85	62.69	-1.94	-5.52	
10499.00	91.760	181.930	6927.07	2117.07	4181.50	-4177.17	229.03	40°11'9.6268"N	104°34'31.9497"W	6.15	-111.34	2.82	5.46	
10593.00	89.720	176.720	6925.85	2115.85	4275.45	-4271.12	230.13	40°11'8.6983"N	104°34'31.9481"W	5.95	61.92	-2.17	-5.54	
10688.00	91.320	179.720	6924.99	2114.99	4370.43	-4366.05	233.08	40°11'7.7599"N	104°34'31.9228"W	3.58	-10.95	1.68	3.16	
10782.00	91.940	179.600	6922.32	2112.32	4464.38	-4460.01	233.64	40°11'6.8314"N	104°34'31.9283"W	0.67	176.78	0.66	-0.13	
10877.00	88.030	179.820	6922.34	2112.34	4559.34	-4554.99	234.12	40°11'5.8928"N	104°34'31.9348"W	4.12	-0.87	-4.12	0.23	
10971.00	92.650	179.750	6921.78	2111.78	4653.29	-4648.97	234.47	40°11'4.9642"N	104°34'31.9429"W	4.92	174.22	4.91	-0.07	
11066.00	90.180	180.000	6919.44	2109.44	4748.23	-4743.93	234.68	40°11'4.0258"N	104°34'31.9530"W	2.61	-93.99	-2.60	0.26	
11161.00	90.150	179.570	6919.16	2109.16	4843.21	-4838.93	235.04	40°11'3.0870"N	104°34'31.9612"W	0.45	168.47	-0.03	-0.45	
11255.00	89.660	179.670	6919.32	2109.32	4937.20	-4932.93	235.66	40°11'2.1581"N	104°34'31.9657"W	0.53	0.00	-0.52	0.11	
11349.00	89.660	179.670	6919.88	2109.88	5031.18	-5026.92	236.20	40°11'1.2292"N	104°34'31.9714"W	0.00	35.54	0.00	0.00	
11444.00	89.940	179.870	6920.21	2110.21	5126.16	-5121.92	236.58	40°11'0.2905"N	104°34'31.9792"W	0.36	-66.80	0.29	0.21	
11538.00	90.000	179.730	6920.26	2110.26	5220.14	-5215.92	236.91	40°10'59.3616"N	104°34'31.9876"W	0.16	-150.26	0.06	-0.15	
11632.00	89.720	179.570	6920.49	2110.49	5314.12	-5309.92	237.49	40°10'58.4327"N	104°34'31.9929"W	0.34	-72.12	-0.30	-0.17	
11727.00	89.820	179.260	6920.87	2110.87	5409.11	-5404.91	238.46	40°10'57.4939"N	104°34'31.9931"W	0.34	119.06	0.11	-0.33	
11821.00	89.720	179.440	6921.25	2111.25	5503.10	-5498.91	239.52	40°10'56.5650"N	104°34'31.9920"W	0.22	79.17	-0.11	0.19	
11915.00	89.940	180.590	6921.53	2111.53	5597.07	-5592.90	239.50	40°10'55.6362"N	104°34'32.0050"W	1.25	-98.37	0.23	1.22	
12010.00	89.690	178.890	6921.83	2111.83	5692.05	-5687.90	239.93	40°10'54.6974"N	104°34'32.0122"W	1.81	110.56	-0.26	-1.79	
12104.00	89.630	179.050	6922.39	2112.39	5786.05	-5781.88	241.62	40°10'53.7686"N	104°34'32.0030"W	0.18	-90.00	-0.06	0.17	
12198.00	89.630	179.010	6923.00	2113.00	5880.04	-5875.87	243.21	40°10'52.8397"N	104°34'31.9951"W	0.04	-109.23	0.00	-0.04	
12293.00	89.480	178.580	6923.74	2113.74	5975.04	-5970.84	245.21	40°10'51.9010"N	104°34'31.9822"W	0.48	93.11	-0.16	-0.45	
12387.00	89.350	180.980	6924.70	2114.70	6069.01	-6064.83	245.57	40°10'50.9722"N	104°34'31.9901"W	2.56	-35.26	-0.14	2.55	
12481.00	92.460	178.780	6923.21	2113.21	6162.96	-6158.80	245.77	40°10'50.0436"N	104°34'32.0002"W	4.05	-175.53	3.31	-2.34	
12576.00	89.260	178.530	6921.78	2111.78	6257.93	-6253.75	247.99	40°10'49.1052"N	104°34'31.9843"W	3.38	69.89	-3.37	-0.26	
12670.00	89.780	179.950	6922.57	2112.57	6351.92	-6347.74	249.24	40°10'48.1763"N	104°34'31.9808"W	1.61	161.57	0.55	1.51	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN Y05-756
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-48046
Facility	SEC.29-T03N-R64W	Wellbore	GUTTERSEN Y05-756 AWB
Slot	SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29)		

### WELLPATH DATA (201 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	TVDSS [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Toothface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
12765.00	89.480	180.050	6923.19	2113.19	6446.89	-6442.74	249.24	40°10'47.2376"N	104°34'31.9936"W	0.33	-63.81	-0.32	0.11	
12858.00	89.780	179.440	6923.79	2113.79	6539.87	-6535.73	249.66	40°10'46.3186"N	104°34'32.0007"W	0.73	74.58	0.32	-0.66	
12953.00	89.940	180.020	6924.02	2114.02	6634.85	-6630.73	250.10	40°10'45.3798"N	104°34'32.0077"W	0.63	-93.07	0.17	0.61	
13047.00	89.910	179.460	6924.14	2114.14	6728.83	-6724.73	250.53	40°10'44.4509"N	104°34'32.0149"W	0.60	-159.18	-0.03	-0.60	
13141.00	89.200	179.190	6924.87	2114.87	6822.82	-6818.72	251.64	40°10'43.5221"N	104°34'32.0132"W	0.81	12.88	-0.76	-0.29	
13331.00	90.250	179.430	6925.34	2115.78	7012.80	-7008.70	253.92	40°10'41.6445"N	104°34'32.0093"W	0.57	96.65	0.55	0.13	
13425.00	90.180	180.030	6925.43	2115.43	7106.78	-7102.70	254.37	40°10'40.7157"N	104°34'32.0162"W	0.64	-108.25	-0.07	0.64	
13520.00	89.880	179.120	6925.38	2115.38	7201.77	-7197.69	255.07	40°10'39.7769"N	104°34'32.0199"W	1.01	-115.38	-0.32	-0.96	
13614.00	89.510	178.340	6925.88	2115.88	7295.76	-7291.67	257.16	40°10'38.8481"N	104°34'32.0056"W	0.92	64.71	-0.39	-0.83	
13709.00	89.940	179.250	6926.34	2116.34	7390.76	-7386.65	259.15	40°10'37.9093"N	104°34'31.9927"W	1.06	128.66	0.45	0.96	
13803.00	89.780	179.450	6926.57	2116.57	7484.75	-7480.64	260.22	40°10'36.9804"N	104°34'31.9916"W	0.27	-107.24	-0.17	0.21	
13898.00	89.600	178.870	6927.08	2117.08	7579.75	-7575.63	261.61	40°10'36.0417"N	104°34'31.9864"W	0.64	73.04	-0.19	-0.61	
13992.00	89.780	179.460	6927.59	2117.59	7673.74	-7669.62	262.98	40°10'35.1128"N	104°34'31.9813"W	0.66	-101.31	0.19	0.63	
14087.00	89.690	179.010	6928.03	2118.03	7768.73	-7764.61	264.25	40°10'34.1740"N	104°34'31.9778"W	0.48	-62.10	-0.09	-0.47	
14182.00	89.780	178.840	6928.47	2118.47	7863.73	-7859.59	266.03	40°10'33.2353"N	104°34'31.9676"W	0.20	116.57	0.09	-0.18	
14276.00	89.630	179.140	6928.95	2118.95	7957.73	-7953.57	267.69	40°10'32.3064"N	104°34'31.9588"W	0.36	43.45	-0.16	0.32	
14371.00	89.820	179.320	6929.41	2119.41	8052.72	-8048.56	268.97	40°10'31.3676"N	104°34'31.9551"W	0.28	21.43	0.20	0.19	
14466.00	90.890	179.740	6928.82	2118.82	8147.71	-8143.56	269.75	40°10'30.4289"N	104°34'31.9579"W	1.21	-113.68	1.13	0.44	
14560.00	89.780	177.210	6928.27	2118.27	8241.69	-8237.51	272.25	40°10'29.5002"N	104°34'31.9383"W	2.94	62.39	-1.18	-2.69	
14655.00	90.460	178.510	6928.07	2118.07	8336.68	-8332.44	275.79	40°10'28.5618"N	104°34'31.9053"W	1.54	-165.96	0.72	1.37	
14750.00	89.940	178.380	6927.74	2117.74	8431.68	-8427.41	278.37	40°10'27.6231"N	104°34'31.8849"W	0.56	49.18	-0.55	-0.14	
14844.00	90.890	179.480	6927.06	2117.06	8525.68	-8521.39	280.13	40°10'26.6943"N	104°34'31.8749"W	1.55	-96.71	1.01	1.17	
14939.00	90.830	178.970	6925.63	2115.63	8620.66	-8616.37	281.41	40°10'25.7556"N	104°34'31.8711"W	0.54	-97.02	-0.06	-0.54	
15033.00	90.740	178.240	6924.34	2114.34	8714.65	-8710.33	283.70	40°10'24.8269"N	104°34'31.8542"W	0.78	1.21	-0.10	-0.78	
15128.00	91.690	178.260	6922.33	2112.33	8809.63	-8805.26	286.60	40°10'23.8885"N	104°34'31.8296"W	1.00	-120.53	1.00	0.02	
15222.00	90.220	175.770	6920.76	2110.76	8903.57	-8899.11	291.50	40°10'22.9606"N	104°34'31.7792"W	3.08	76.84	-1.56	-2.65	
15317.00	91.170	179.840	6919.61	2109.61	8998.53	-8994.01	295.13	40°10'22.0225"N	104°34'31.7451"W	4.40	-149.39	1.00	4.28	
15506.00	90.460	179.420	6916.92	2106.92	9187.48	-9182.99	296.35	40°10'20.1550"N	104°34'31.7547"W	0.44	-67.06	-0.38	-0.22	
15695.00	90.680	178.900	6915.04	2105.04	9376.46	-9371.96	299.12	40°10'18.2874"N	104°34'31.7444"W	0.30	66.41	0.12	-0.28	
15790.00	90.990	179.610	6913.66	2103.66	9471.44	-9466.94	300.36	40°10'17.3487"N	104°34'31.7412"W	0.82	-144.18	0.33	0.75	
15884.00	89.660	178.650	6913.12	2103.12	9565.43	-9560.92	301.79	40°10'16.4199"N	104°34'31.7355"W	1.74	41.13	-1.41	-1.02	
15979.00	91.080	179.890	6912.51	2102.51	9660.42	-9655.91	303.00	40°10'15.4811"N	104°34'31.7327"W	1.98	-137.29	1.49	1.31	
16074.00	90.950	179.770	6910.83	2100.83	9755.38	-9750.89	303.28	40°10'14.5425"N	104°34'31.7418"W	0.19	-170.54	-0.14	-0.13	
16168.00	90.890	179.760	6909.32	2099.32	9849.35	-9844.88	303.66	40°10'13.6137"N	104°34'31.7494"W	0.06	-80.53	-0.06	-0.01	
16263.00	91.020	178.980	6907.74	2097.74	9944.33	-9939.86	304.71	40°10'12.6751"N	104°34'31.7487"W	0.83	83.77	0.14	-0.82	
16357.00	91.080	179.530	6906.01	2096.01	10038.31	-10033.84	305.93	40°10'11.7463"N	104°34'31.7456"W	0.59	-133.49	0.06	0.59	
16452.00	90.710	179.140	6904.53	2094.53	10133.29	-10128.82	307.03	40°10'10.8077"N	104°34'31.7442"W	0.57	28.98	-0.39	-0.41	
16547.00	91.450	179.550	6902.74	2092.74	10228.26	-10223.80	308.12	40°10'9.8691"N	104°34'31.7429"W	0.89	124.68	0.78	0.43	
16641.00	90.280	181.240	6901.32	2091.32	10322.20	-10317.78	307.47	40°10'8.9404"N	104°34'31.7639"W	2.19	-81.08	-1.24	1.80	
16736.00	90.650	178.880	6900.55	2090.55	10417.16	-10412.77	307.37	40°10'8.0018"N	104°34'31.7780"W	2.51	-18.43	0.39	-2.48	
16830.00	90.770	178.840	6899.38	2089.38	10511.15	-10506.74	309.24	40°10'7.0730"N	104°34'31.7665"W	0.13	90.00	0.13	-0.04	
16925.00	90.770	178.990	6898.11	2088.11	10606.14	-10601.72	311.04	40°10'6.1343"N	104°34'31.7561"W	0.16	73.44	0.00	0.16	
17020.00	90.990	179.730	6896.65	2086.65	10701.12	-10696.70	312.10	40°10'5.1957"N	104°34'31.7552"W	0.81	80.73	0.23	0.78	
17209.00	91.140	180.650	6893.13	2083.13	10890.02	-10885.66	311.48	40°10'3.3285"N	104°34'31.7886"W	0.49	-105.56	0.08	0.49	
17303.00	90.800	179.430	6891.54	2081.54	10983.97	-10979.65	311.41	40°10'2.3998"N	104°34'31.8021"W	1.35	-126.87	-0.36	-1.30	



### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN Y05-756
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-48046
Facility	SEC.29-T03N-R64W	Wellbore	GUTTERSEN Y05-756 AWB
Slot	SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29)		

### WELLPATH DATA (201 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
17398.00	90.740	179.350	6890.27	2080.27	11078.95	-11074.63	312.42	40°10'1.4611"N	104°34'31.8018"W	0.11	90.00	-0.06	-0.08	
17492.00	90.740	179.500	6889.05	2079.05	11172.94	-11168.62	313.36	40°10'0.5322"N	104°34'31.8023"W	0.16	146.31	0.00	0.16	
17587.00	90.650	179.560	6887.90	2077.90	11267.92	-11263.61	314.14	40°09'59.5935"N	104°34'31.8050"W	0.11	-84.22	-0.09	0.06	
17681.00	90.740	178.670	6886.76	2076.76	11361.91	-11357.59	315.59	40°09'58.6647"N	104°34'31.7989"W	0.95	86.87	0.10	-0.95	
17870.00	90.800	179.770	6884.22	2074.22	11550.88	-11546.55	318.17	40°09'56.7972"N	104°34'31.7912"W	0.58	-81.46	0.03	0.58	
17965.00	90.950	178.770	6882.77	2072.77	11645.86	-11641.53	319.38	40°09'55.8585"N	104°34'31.7883"W	1.06	-141.19	0.16	-1.05	
18060.00	90.490	178.400	6881.58	2071.58	11740.85	-11736.50	321.72	40°09'54.9199"N	104°34'31.7709"W	0.62	79.33	-0.48	-0.39	
18155.00	90.650	179.250	6880.63	2070.63	11835.84	-11831.47	323.67	40°09'53.9812"N	104°34'31.7585"W	0.91	-78.87	0.17	0.89	
18249.00	90.770	178.640	6879.47	2069.47	11929.83	-11925.45	325.40	40°09'53.0524"N	104°34'31.7489"W	0.66	61.82	0.13	-0.65	
18438.00	90.920	178.920	6876.68	2066.68	12118.81	-12114.38	329.43	40°09'51.1850"N	104°34'31.7224"W	0.17	160.64	0.08	0.15	
18533.00	90.180	179.180	6875.77	2065.77	12213.80	-12209.37	331.00	40°09'50.2463"N	104°34'31.7149"W	0.83	-113.70	-0.78	0.27	
18722.00	90.000	178.770	6875.47	2065.47	12402.80	-12398.33	334.38	40°09'48.3787"N	104°34'31.6967"W	0.24	-43.03	-0.10	-0.22	
18817.00	90.150	178.630	6875.35	2065.35	12497.80	-12493.31	336.54	40°09'47.4399"N	104°34'31.6817"W	0.22	117.12	0.16	-0.15	
19006.00	89.940	179.040	6875.20	2065.20	12686.80	-12682.27	340.38	40°09'45.5723"N	104°34'31.6576"W	0.24	63.44	-0.11	0.22	
19100.00	90.060	179.280	6875.20	2065.20	12780.79	-12776.26	341.76	40°09'44.6434"N	104°34'31.6525"W	0.29	56.31	0.13	0.26	
19289.00	90.280	179.610	6874.64	2064.64	12969.77	-12965.25	343.59	40°09'42.7757"N	104°34'31.6543"W	0.21	-107.59	0.12	0.17	
19384.00	90.150	179.200	6874.28	2064.28	13064.76	-13060.24	344.57	40°09'41.8369"N	104°34'31.6543"W	0.45	66.80	-0.14	-0.43	
19573.00	90.180	179.270	6873.74	2063.74	13253.75	-13249.23	347.10	40°09'39.9693"N	104°34'31.6472"W	0.04	-111.37	0.02	0.04	
19762.00	90.000	178.810	6873.44	2063.44	13442.74	-13438.20	350.26	40°09'38.1016"N	104°34'31.6318"W	0.26	-103.00	-0.10	-0.24	
19826.00	89.880	178.290	6873.51	2063.51	13506.74	-13502.18	351.88	40°09'37.4692"N	104°34'31.6195"W	0.83	0.00	-0.19	-0.81	LAST BH MWD SURVEY
19850.00‡	89.880	178.290	6873.56	2063.56	13530.74	-13526.17	352.60	40°09'37.2321"N	104°34'31.6135"W	0.00		0.00	0.00	EXTRAPOLATED TO TD

### HOLE & CASING SECTIONS - Ref Wellbore: GUTTERSEN Y05-756 AWB Ref Wellpath: GUTTERSEN Y05-756 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	1929.00	1899.00	30.00	1928.99	0.00	0.00	0.54	1.03
9.625in Casing Surface	30.00	1929.00	1899.00	30.00	1928.99	0.00	0.00	0.54	1.03
8.5in Open Hole	1929.00	19850.00	17921.00	1928.99	6873.56	0.54	1.03	-13526.17	352.60

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN Y05-756
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-48046
Facility	SEC.29-T03N-R64W	Wellbore	GUTTERSEN Y05-756 AWB
Slot	SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29)		

### TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
GUTTERSEN Y05-756 BHL REV-3 (75'FSL & 2552'FWL, SEC.Y05)	6877.00	-13526.87	328.85	3258379.08	1302602.26	40°09'37.2276"N	104°34'31.9195"W	point
GUTTERSEN Y05-756 TPZ REV-3 (2288'FSL & 2498'FWL, SEC.29)	6906.31	-811.00	165.93	3258216.18	1315317.56	40°11'42.8960"N	104°34'32.3105"W	point
GUTTERSEN Y05 SECT.LINES SEC.05-T02N-R64W	8996.00	-11026.90	-2248.27	3255802.08	1305102.11	40°10'2.1952"N	104°35'4.7782"W	polygon
	2D Polygon: dimensions not calculated							
GUTTERSEN Y05 SECT.LINES SEC.29-T03N-R64W	8996.00	-493.06	-2331.39	3255718.96	1315635.48	40°11'46.2937"N	104°35'4.4480"W	polygon
	2D Polygon: dimensions not calculated							
GUTTERSEN Y05 SECT.LINES SEC.32-T03N-R64W	8996.00	-5779.06	-2295.31	3255755.04	1310349.72	40°10'54.0565"N	104°35'4.6863"W	polygon
	2D Polygon: dimensions not calculated							
GUTTERSEN Y05-756 WSU BOUNDARY	9001.00	864.33	-1027.71	3257022.58	1316992.81	40°11'59.5733"N	104°34'47.4675"W	polygon
	2D Polygon: dimensions not calculated							
GUTTERSEN Y05-756 WSU BOUNDARY 460' SETBACK	9001.00	415.64	-564.53	3257485.74	1316544.15	40°11'55.0921"N	104°34'41.5588"W	polygon
	2D Polygon: dimensions not calculated							

### WELLPATH COMPOSITION - Ref Wellbore: GUTTERSEN Y05-756 AWB Ref Wellpath: GUTTERSEN Y05-756 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1924.00	Gyrodata 2015 - GC+DROP+COND	13.5" Gyrodata (GYRODATA 2015-GC-DROP-COND) <0' - 1924">	GUTTERSEN Y05-756 AWB	1/10/2020
1924.00	19850.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	8.5" ATK (OWSG MWD REV.2+IFR1+MSA) <1991' - 19826">	GUTTERSEN Y05-756 AWB	1/10/2020



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN Y05-756
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-48046
Facility	SEC.29-T03N-R64W	Wellbore	GUTTERSEN Y05-756 AWB
Slot	SLOT#37 GUTTERSEN Y05-756 (2211'FNL & 2338'FWL, SEC.29)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
79.00	0.010	139.650	79.00	3RD PARTY FIRST GYRO SURVEY
1924.00	0.600	284.890	1923.99	TIE ON TO 3RD PARTY GYRO SURVEY
1991.00	0.900	318.760	1990.98	FIRST BH MWD SURVEY
19826.00	89.880	178.290	6873.51	LAST BH MWD SURVEY
19850.00	89.880	178.290	6873.56	EXTRAPOLATED TO TD