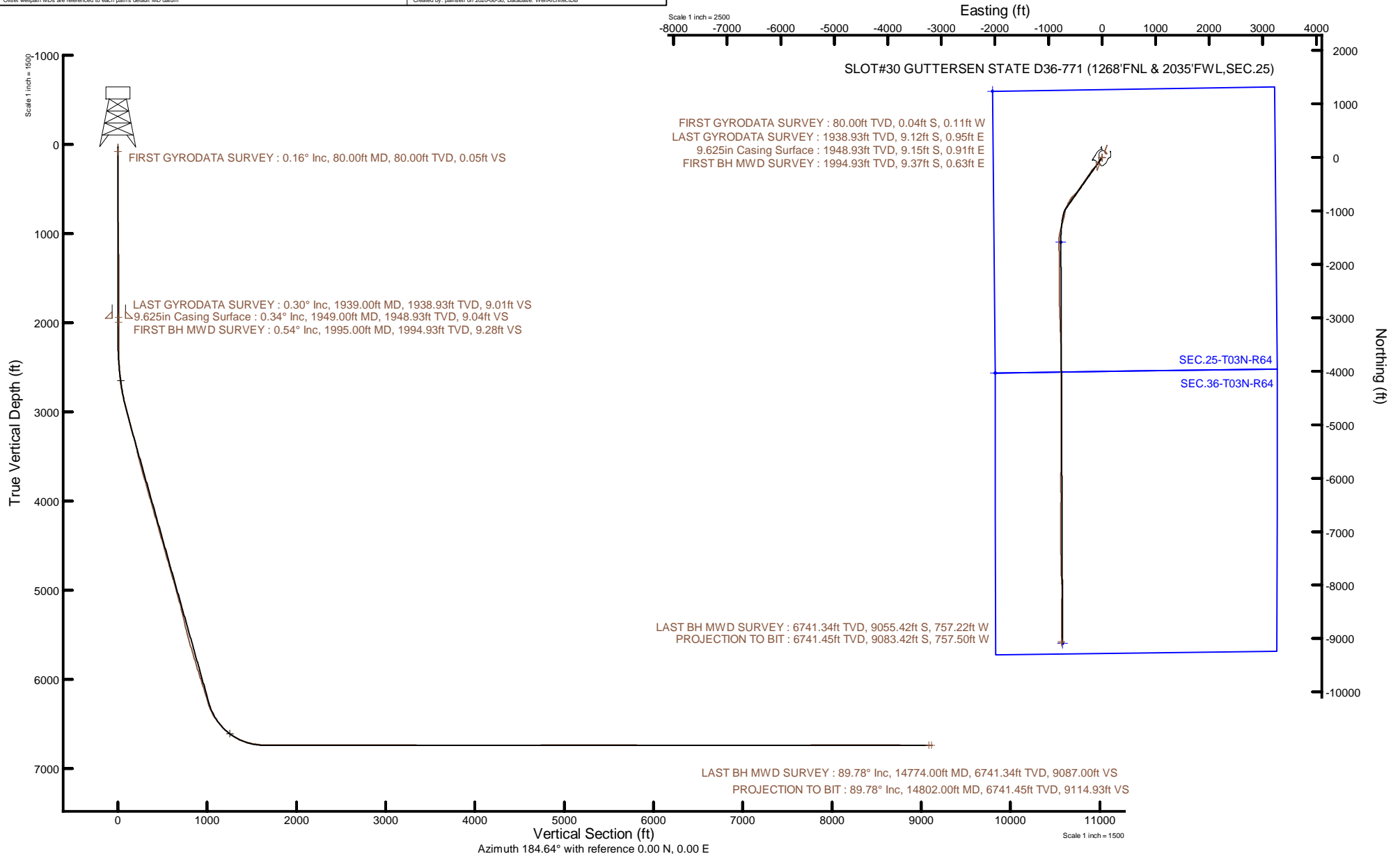


# NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#30 GUTTERSEN STATE D36-771 (1268°FNL & 2035°FWL,SEC.25)  
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GUTTERSEN STATE D36-771  
Facility: SEC.25-T03N-R64W Wellbore: GUTTERSEN STATE D36-771 PWB

Plot reference wellpath is GUTTERSEN STATE D36-771 (REV-A-1) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to H&P 517 (4787'GL+30KB@4817) (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 517 (4787'GL+30KB@4817) (RKB)	Scale: True distance
H&P 517 (4787'GL+30KB@4817) (RKB) to Mean Sea Level: 4817 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#30 GUTTERSEN STATE D36-771 (1268°FNL & 2035°FWL,SEC.25)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: painsetr on 2020-06-30; Database: WellArchitect:DB



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN STATE D36-771
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.25-T03N-R64W	Wellbore	GUTTERSEN STATE D36-771 AWP
Slot	SLOT#30 GUTTERSEN STATE D36-771 (1268'FNL & 2035'FWL,SEC.25)		

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	6/30/2020 at 6:33:12 AM
Convergence at slot	0.64° 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	-1189.90	1804.05	3278792.08	1317318.23	40°12'0.4622"N	104°30'6.8756"W
Facility Reference Pt			3276988.12	1318508.08	40°12'12.4200"N	104°30'29.9520"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 (4787'GL+30'KB@4817') (RKB) to Facility Vertical Datum	4817.00ft
Horizontal Reference Pt	Slot	H&P 517 (4787'GL+30'KB@4817') (RKB) to Mean Sea Level	4817.00ft
Vertical Reference Pt	H&P 517 (4787'GL+30'KB@4817') (RKB)	H&P 517 (4787'GL+30'KB@4817') (RKB) to Ground Level at Slot (SLOT#30 GUTTERSEN STATE D36-771 (1268'FNL & 2035'FWL,SEC.25))	4817.00ft
MD Reference Pt	H&P 517 (4787'GL+30'KB@4817') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	184.64°

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN STATE D36-771
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.25-T03N-R64W	Wellbore	GUTTERSEN STATE D36-771 AWB
Slot	SLOT#30 GUTTERSEN STATE D36-771 (1268'FNL & 2035'FWL,SEC.25)		

WELLPATH DATA (158 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	250.140	0.00	0.00	0.00	0.00	40°12'0.4622"N	104°30'6.8756"W	0.00	0.00	0.00	0.00	
80.00	0.160	250.140	80.00	0.05	-0.04	-0.11	40°12'0.4618"N	104°30'6.8770"W	0.20	-151.56	0.20	0.00	FIRST GYRODATA SURVEY
174.00	0.100	148.230	174.00	0.17	-0.15	-0.19	40°12'0.4607"N	104°30'6.8780"W	0.22	-0.34	-0.06	-108.41	
266.00	0.490	147.960	266.00	0.55	-0.55	0.07	40°12'0.4567"N	104°30'6.8748"W	0.42	157.27	0.42	-0.29	
329.00	0.190	210.420	329.00	0.86	-0.87	0.16	40°12'0.4536"N	104°30'6.8737"W	0.69	65.49	-0.48	99.14	
423.00	0.410	250.970	423.00	1.13	-1.12	-0.24	40°12'0.4512"N	104°30'6.8789"W	0.31	31.88	0.23	43.14	
518.00	0.520	258.240	517.99	1.39	-1.32	-0.98	40°12'0.4493"N	104°30'6.8885"W	0.13	-137.90	0.12	7.65	
613.00	0.370	190.750	612.99	1.82	-1.70	-1.46	40°12'0.4455"N	104°30'6.8947"W	0.54	-153.24	-0.16	-71.04	
708.00	0.230	83.920	707.99	2.09	-1.99	-1.33	40°12'0.4427"N	104°30'6.8930"W	0.51	-168.33	-0.15	-112.45	
802.00	0.520	280.730	801.99	2.01	-1.89	-1.56	40°12'0.4437"N	104°30'6.8960"W	0.79	-126.40	0.31	-173.61	
897.00	0.800	185.870	896.98	2.62	-2.47	-2.05	40°12'0.4381"N	104°30'6.9024"W	1.04	68.41	0.29	-99.85	
992.00	1.070	210.240	991.97	4.09	-3.89	-2.57	40°12'0.4240"N	104°30'6.9093"W	0.50	-141.43	0.28	25.65	
1086.00	0.800	192.310	1085.96	5.53	-5.29	-3.15	40°12'0.4103"N	104°30'6.9170"W	0.42	-116.69	-0.29	-19.07	
1181.00	0.720	158.680	1180.95	6.72	-6.50	-3.08	40°12'0.3984"N	104°30'6.9162"W	0.47	-137.28	-0.08	-35.40	
1276.00	0.580	144.030	1275.95	7.62	-7.44	-2.58	40°12'0.3890"N	104°30'6.9099"W	0.23	158.34	-0.15	-15.42	
1371.00	0.500	147.720	1370.94	8.32	-8.18	-2.07	40°12'0.3816"N	104°30'6.9035"W	0.09	-134.87	-0.08	3.88	
1466.00	0.360	92.670	1465.94	8.64	-8.54	-1.55	40°12'0.3779"N	104°30'6.8968"W	0.44	80.94	-0.15	-57.95	
1560.00	0.460	123.000	1559.94	8.81	-8.76	-0.94	40°12'0.3757"N	104°30'6.8890"W	0.25	35.75	0.11	32.27	
1655.00	0.560	130.070	1654.93	9.26	-9.27	-0.27	40°12'0.3706"N	104°30'6.8804"W	0.12	-146.66	0.11	7.44	
1750.00	0.310	80.240	1749.93	9.47	-9.53	0.34	40°12'0.3680"N	104°30'6.8726"W	0.45	-71.63	-0.26	-52.45	
1844.00	0.460	48.370	1843.93	9.13	-9.23	0.88	40°12'0.3709"N	104°30'6.8657"W	0.27	-176.91	0.16	-33.90	
1939.00	0.300	236.200	1938.93	9.01	-9.12	0.95	40°12'0.3720"N	104°30'6.8646"W	0.80	-12.32	-0.17	-181.23	LAST GYRODATA SURVEY
1995.00	0.540	230.690	1994.93	9.28	-9.37	0.63	40°12'0.3696"N	104°30'6.8689"W	0.43	-179.41	0.43	-9.84	FIRST BH MWD SURVEY
2089.00	0.060	56.620	2088.93	9.56	-9.62	0.33	40°12'0.3671"N	104°30'6.8728"W	0.64	-90.23	-0.51	-185.18	
2184.00	0.090	8.200	2183.92	9.46	-9.52	0.38	40°12'0.3681"N	104°30'6.8721"W	0.07	-67.63	0.03	-50.97	
2278.00	0.220	322.800	2277.92	9.25	-9.30	0.28	40°12'0.3703"N	104°30'6.8733"W	0.18	-114.65	0.14	-48.30	
2373.00	0.900	220.990	2372.92	9.71	-9.72	-0.32	40°12'0.3662"N	104°30'6.8811"W	1.02	-8.67	0.72	-107.17	
2468.00	3.130	214.800	2467.86	12.56	-12.41	-2.29	40°12'0.3398"N	104°30'6.9069"W	2.36	3.60	2.35	-6.52	
2562.00	5.490	216.350	2561.58	18.60	-18.14	-6.42	40°12'0.2837"N	104°30'6.9610"W	2.51	-2.75	2.51	1.65	
2657.00	7.930	215.500	2655.93	28.09	-27.14	-12.92	40°12'0.1955"N	104°30'7.0460"W	2.57	1.11	2.57	-0.89	
2751.00	11.850	215.870	2748.51	41.92	-40.24	-22.34	40°12'0.0670"N	104°30'7.1694"W	4.17	-7.37	4.17	0.39	
2846.00	14.300	214.590	2841.04	60.43	-57.81	-34.72	40°11'59.8948"N	104°30'7.3314"W	2.60	-0.31	2.58	-1.35	
2941.00	16.980	214.540	2932.52	82.63	-78.90	-49.25	40°11'59.6881"N	104°30'7.5217"W	2.82	-135.31	2.82	-0.05	
3035.00	16.840	214.060	3022.45	106.38	-101.48	-64.66	40°11'59.4666"N	104°30'7.7235"W	0.21	69.45	-0.15	-0.51	
3129.00	17.490	219.240	3112.27	129.87	-123.71	-81.22	40°11'59.2488"N	104°30'7.9402"W	1.77	-83.14	0.69	5.51	
3224.00	17.660	215.530	3202.84	153.99	-146.49	-98.63	40°11'59.0256"N	104°30'8.1678"W	1.19	94.33	0.18	-3.91	
3318.00	17.620	217.890	3292.42	178.13	-169.32	-115.65	40°11'58.8019"N	104°30'8.3905"W	0.76	98.98	-0.04	2.51	
3413.00	17.430	223.670	3383.02	201.21	-190.96	-134.31	40°11'58.5902"N	104°30'8.6340"W	1.84	78.69	-0.20	6.08	
3507.00	17.830	229.020	3472.61	222.43	-210.59	-154.89	40°11'58.3986"N	104°30'8.9022"W	1.77	-93.00	0.43	5.69	
3602.00	17.820	223.420	3563.05	244.16	-230.68	-175.87	40°11'58.2023"N	104°30'9.1753"W	1.80	-91.06	-0.01	-5.89	
3697.00	17.980	214.320	3653.47	268.24	-253.36	-194.13	40°11'57.9803"N	104°30'9.4140"W	2.95	-24.63	0.17	-9.58	
3791.00	18.740	213.240	3742.69	294.10	-277.97	-210.59	40°11'57.7389"N	104°30'9.6296"W	0.89	148.29	0.81	-1.15	
3886.00	18.290	214.130	3832.77	320.47	-303.07	-227.31	40°11'57.4927"N	104°30'9.8488"W	0.56	-159.79	-0.47	0.94	
3980.00	17.890	213.650	3922.12	345.94	-327.30	-243.59	40°11'57.2551"N	104°30'10.0621"W	0.45	61.80	-0.43	-0.51	
4075.00	17.970	214.130	4012.51	371.46	-351.58	-259.90	40°11'57.0170"N	104°30'10.2757"W	0.18	-6.86	0.08	0.51	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN STATE D36-771
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.25-T03N-R64W	Wellbore	GUTTERSEN STATE D36-771 AWP
Slot	SLOT#30 GUTTERSEN STATE D36-771 (1268'FNL & 2035'FWL,SEC.25)		

WELLPATH DATA (158 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Tooface [°]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
4169.00	18.230	214.030	4101.86	396.89	-375.76	-276.26	40°11'56.7799"N	104°30'10.4901"W	0.28	125.78	0.28	-0.11	
4264.00	18.040	214.890	4192.14	422.55	-400.14	-292.99	40°11'56.5408"N	104°30'10.7092"W	0.35	-61.32	-0.20	0.91	
4359.00	18.210	213.910	4282.43	448.20	-424.53	-309.69	40°11'56.3017"N	104°30'10.9279"W	0.37	131.49	0.18	-1.03	
4454.00	18.060	214.460	4372.71	473.93	-448.99	-326.30	40°11'56.0618"N	104°30'11.1455"W	0.24	156.60	-0.16	0.58	
4548.00	18.010	214.530	4462.09	499.17	-472.98	-342.78	40°11'55.8267"N	104°30'11.3614"W	0.06	-175.33	-0.05	0.07	
4643.00	17.860	214.490	4552.47	524.54	-497.08	-359.36	40°11'55.5903"N	104°30'11.5785"W	0.16	2.48	-0.16	-0.04	
4738.00	18.370	214.560	4642.76	550.15	-521.42	-376.10	40°11'55.3517"N	104°30'11.7977"W	0.54	98.42	0.54	0.07	
4832.00	18.350	215.000	4731.98	575.75	-545.74	-392.99	40°11'55.1133"N	104°30'12.0189"W	0.15	-127.20	-0.02	0.47	
4927.00	18.260	214.620	4822.17	601.55	-570.23	-410.02	40°11'54.8731"N	104°30'12.2419"W	0.16	-125.94	-0.09	-0.40	
5022.00	18.170	214.220	4912.41	627.32	-594.73	-426.81	40°11'54.6329"N	104°30'12.4618"W	0.16	83.60	-0.09	-0.42	
5116.00	18.180	214.500	5001.72	652.79	-618.93	-443.35	40°11'54.3956"N	104°30'12.6785"W	0.09	131.28	0.01	0.30	
5211.00	18.010	215.130	5092.02	678.30	-643.16	-460.20	40°11'54.1581"N	104°30'12.8991"W	0.27	121.19	-0.18	0.66	
5305.00	17.450	218.360	5181.56	702.54	-666.10	-477.31	40°11'53.9333"N	104°30'13.1229"W	1.20	105.82	-0.60	3.44	
5400.00	16.900	227.560	5272.34	724.51	-686.59	-496.34	40°11'53.7329"N	104°30'13.3711"W	2.91	29.21	-0.58	9.68	
5495.00	18.510	230.360	5362.84	745.15	-705.53	-518.15	40°11'53.5482"N	104°30'13.6549"W	1.92	-80.28	1.69	2.95	
5589.00	18.710	227.200	5451.93	766.67	-725.29	-540.70	40°11'53.3554"N	104°30'13.9483"W	1.09	-111.55	0.21	-3.36	
5684.00	17.620	214.760	5542.22	790.34	-747.46	-560.08	40°11'53.1385"N	104°30'14.2013"W	4.23	38.64	-1.15	-13.09	
5779.00	18.640	217.270	5632.51	815.57	-771.36	-577.48	40°11'52.9043"N	104°30'14.4289"W	1.35	-73.63	1.07	2.64	
5874.00	19.160	212.510	5722.39	842.14	-796.59	-595.05	40°11'52.6569"N	104°30'14.6590"W	1.71	-140.69	0.55	-5.01	
5969.00	17.960	209.250	5812.45	869.24	-822.52	-610.59	40°11'52.4024"N	104°30'14.8630"W	1.67	-41.29	-1.26	-3.43	
6064.00	19.110	206.230	5902.52	897.02	-849.25	-624.62	40°11'52.1399"N	104°30'15.0477"W	1.58	173.36	1.21	-3.18	
6158.00	18.860	206.320	5991.41	925.44	-876.67	-638.15	40°11'51.8704"N	104°30'15.2261"W	0.27	-149.62	-0.27	0.10	
6253.00	18.680	205.990	6081.36	953.88	-904.11	-651.63	40°11'51.6008"N	104°30'15.4037"W	0.22	147.10	-0.19	-0.35	
6348.00	18.270	206.840	6171.46	981.84	-931.07	-665.02	40°11'51.3359"N	104°30'15.5801"W	0.52	-179.13	-0.43	0.89	
6443.00	17.480	206.800	6261.88	1008.84	-957.09	-678.18	40°11'51.0802"N	104°30'15.7534"W	0.83	-48.83	-0.83	-0.04	
6537.00	24.640	189.720	6349.62	1041.51	-989.08	-687.87	40°11'50.7652"N	104°30'15.8830"W	9.96	-3.58	7.62	-18.17	
6632.00	32.360	188.820	6433.05	1086.66	-1033.79	-695.12	40°11'50.3242"N	104°30'15.9829"W	8.14	11.79	8.13	-0.95	
6727.00	40.430	191.400	6509.46	1142.70	-1089.20	-705.13	40°11'49.7777"N	104°30'16.1198"W	8.64	17.82	8.49	2.72	
6821.00	49.530	195.200	6575.89	1208.27	-1153.73	-720.56	40°11'49.1418"N	104°30'16.3281"W	10.09	6.96	9.68	4.04	
6916.00	55.630	196.100	6633.59	1282.29	-1226.34	-740.93	40°11'48.4266"N	104°30'16.6010"W	6.46	-9.77	6.42	0.95	
7010.00	65.290	194.280	6679.88	1362.60	-1305.18	-762.27	40°11'47.6499"N	104°30'16.8874"W	10.41	-5.72	10.28	-1.94	
7105.00	76.740	193.110	6710.74	1451.17	-1392.32	-783.47	40°11'46.7912"N	104°30'17.1732"W	12.11	-55.88	12.05	-1.23	
7200.00	81.100	186.710	6729.01	1543.93	-1484.09	-799.47	40°11'45.8861"N	104°30'17.3926"W	8.05	-18.61	4.59	-6.74	
7295.00	89.570	183.870	6736.73	1638.52	-1578.28	-808.17	40°11'44.9564"N	104°30'17.5184"W	9.40	-83.84	8.92	-2.99	
7390.00	90.550	174.800	6736.63	1733.01	-1673.18	-807.07	40°11'44.0186"N	104°30'17.5179"W	9.60	110.95	1.03	-9.55	
7484.00	89.880	176.550	6736.28	1825.85	-1766.90	-799.98	40°11'43.0916"N	104°30'17.4401"W	1.99	96.21	-0.71	1.86	
7579.00	89.570	179.400	6736.73	1920.20	-1861.83	-796.63	40°11'42.1532"N	104°30'17.4106"W	3.02	65.77	-0.33	3.00	
7673.00	89.660	179.600	6737.37	2013.82	-1955.83	-795.81	40°11'41.2244"N	104°30'17.4136"W	0.23	18.03	0.10	0.21	
7768.00	90.090	179.740	6737.57	2108.46	-2050.82	-795.26	40°11'40.2856"N	104°30'17.4203"W	0.48	29.25	0.45	0.15	
7863.00	90.340	179.880	6737.22	2203.12	-2145.82	-794.94	40°11'39.3468"N	104°30'17.4300"W	0.30	-111.59	0.26	0.15	
7958.00	90.150	179.400	6736.81	2297.76	-2240.82	-794.35	40°11'38.4081"N	104°30'17.4361"W	0.54	71.92	-0.20	-0.51	
8052.00	90.310	179.890	6736.43	2391.40	-2334.82	-793.76	40°11'37.4792"N	104°30'17.4421"W	0.55	-152.91	0.17	0.52	
8147.00	89.450	179.450	6736.63	2486.04	-2429.81	-793.22	40°11'36.5404"N	104°30'17.4488"W	1.02	72.58	-0.91	-0.46	
8242.00	90.150	181.680	6736.96	2580.80	-2524.80	-794.15	40°11'35.6019"N	104°30'17.4746"W	2.46	-100.95	0.74	2.35	
8336.00	89.970	180.750	6736.87	2674.63	-2618.78	-796.15	40°11'34.6735"N	104°30'17.5139"W	1.01	-78.21	-0.19	-0.99	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN STATE D36-771
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.25-T03N-R64W	Wellbore	GUTTERSEN STATE D36-771 AWP
Slot	SLOT#30 GUTTERSEN STATE D36-771 (1268'FNL & 2035'FWL,SEC.25)		

### WELLPATH DATA (158 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
8431.00	90.400	178.690	6736.56	2769.27	-2713.77	-795.68	40°11'33.7348"N	104°30'17.5217"W	2.22	-103.28	0.45	-2.17	
8526.00	90.060	177.250	6736.18	2863.62	-2808.71	-792.32	40°11'32.7963"N	104°30'17.4920"W	1.56	98.79	-0.36	-1.52	
8621.00	89.910	178.220	6736.20	2957.93	-2903.64	-788.56	40°11'31.8579"N	104°30'17.4574"W	1.03	142.25	-0.16	1.02	
8715.00	89.600	178.460	6736.60	3051.36	-2997.59	-785.84	40°11'30.9292"N	104°30'17.4359"W	0.42	84.96	-0.33	0.26	
8810.00	89.660	179.140	6737.22	3145.87	-3092.57	-783.85	40°11'29.9904"N	104°30'17.4240"W	0.72	-106.91	0.06	0.72	
8905.00	89.110	177.330	6738.24	3240.27	-3187.52	-780.93	40°11'29.0519"N	104°30'17.4000"W	1.99	-54.78	-0.58	-1.91	
9000.00	89.230	177.160	6739.61	3334.46	-3282.40	-776.36	40°11'28.1139"N	104°30'17.3549"W	0.22	53.59	0.13	-0.18	
9094.00	89.820	177.960	6740.39	3427.74	-3376.31	-772.36	40°11'27.1855"N	104°30'17.3169"W	1.06	-143.43	0.63	0.85	
9189.00	89.200	177.500	6741.21	3522.05	-3471.23	-768.60	40°11'26.2471"N	104°30'17.2822"W	0.81	76.46	-0.65	-0.48	
9284.00	89.600	179.160	6742.20	3616.46	-3566.18	-765.83	40°11'25.3085"N	104°30'17.2602"W	1.80	62.08	0.42	1.75	
9378.00	90.220	180.330	6742.35	3710.12	-3660.18	-765.41	40°11'24.3797"N	104°30'17.2684"W	1.41	-94.40	0.66	1.24	
9473.00	90.180	179.810	6742.02	3804.81	-3755.18	-765.53	40°11'23.4410"N	104°30'17.2837"W	0.55	102.53	-0.04	-0.55	
9568.00	90.120	180.080	6741.77	3899.50	-3850.17	-765.43	40°11'22.5022"N	104°30'17.2962"W	0.29	-128.66	-0.06	0.28	
9663.00	89.720	179.580	6741.90	3994.16	-3945.17	-765.15	40°11'21.5635"N	104°30'17.3063"W	0.67	36.03	-0.42	-0.53	
9757.00	89.940	179.740	6742.18	4087.80	-4039.17	-764.59	40°11'20.6346"N	104°30'17.3128"W	0.29	48.18	0.23	0.17	
9852.00	90.280	180.120	6742.00	4182.48	-4134.17	-764.48	40°11'19.6959"N	104°30'17.3250"W	0.54	-107.59	0.36	0.40	
9947.00	90.150	179.710	6741.64	4277.16	-4229.17	-764.34	40°11'18.7571"N	104°30'17.3369"W	0.45	-29.75	-0.14	-0.43	
10042.00	90.220	179.670	6741.33	4371.80	-4324.17	-763.82	40°11'17.8184"N	104°30'17.3440"W	0.08	71.88	0.07	-0.04	
10136.00	90.400	180.220	6740.82	4465.49	-4418.17	-763.73	40°11'16.8895"N	104°30'17.3565"W	0.62	-110.09	0.19	0.59	
10230.00	90.250	179.810	6740.29	4559.18	-4512.16	-763.76	40°11'15.9607"N	104°30'17.3704"W	0.46	-102.10	-0.16	-0.44	
10324.00	90.220	179.670	6739.91	4652.83	-4606.16	-763.33	40°11'15.0318"N	104°30'17.3785"W	0.15	114.15	-0.03	-0.15	
10419.00	90.090	179.960	6739.65	4747.50	-4701.16	-763.02	40°11'14.0930"N	104°30'17.3883"W	0.33	90.00	-0.14	0.31	
10514.00	90.090	180.030	6739.50	4842.18	-4796.16	-763.02	40°11'13.1543"N	104°30'17.4019"W	0.07	-10.31	0.00	0.07	
10609.00	90.310	179.990	6739.17	4936.87	-4891.16	-763.03	40°11'12.2156"N	104°30'17.4158"W	0.24	69.44	0.23	-0.04	
10703.00	90.400	180.230	6738.59	5030.58	-4985.16	-763.21	40°11'11.2868"N	104°30'17.4318"W	0.27	85.63	0.10	0.26	
10798.00	90.490	181.410	6737.85	5125.36	-5080.14	-764.57	40°11'10.3483"N	104°30'17.4630"W	1.25	-121.39	0.09	1.24	
10893.00	89.660	180.050	6737.72	5220.14	-5175.13	-765.78	40°11'9.4099"N	104°30'17.4923"W	1.68	36.47	-0.87	-1.43	
10987.00	90.120	180.390	6737.90	5313.86	-5269.13	-766.14	40°11'8.4811"N	104°30'17.5106"W	0.61	-168.69	0.49	0.36	
11082.00	89.570	180.280	6738.16	5408.59	-5364.13	-766.70	40°11'7.5424"N	104°30'17.5315"W	0.59	-27.30	-0.58	-0.12	
11177.00	89.880	180.120	6738.62	5503.30	-5459.13	-767.03	40°11'6.6037"N	104°30'17.5495"W	0.37	-123.69	0.33	-0.17	
11272.00	89.780	179.970	6738.90	5597.99	-5554.13	-767.11	40°11'5.6650"N	104°30'17.5642"W	0.19	41.99	-0.11	-0.16	
11366.00	89.880	180.060	6739.18	5691.69	-5648.13	-767.13	40°11'4.7362"N	104°30'17.5781"W	0.14	121.61	0.11	0.10	
11461.00	89.720	180.320	6739.51	5786.40	-5743.13	-767.45	40°11'3.7975"N	104°30'17.5959"W	0.32	-100.62	-0.17	0.27	
11555.00	89.690	180.160	6739.99	5880.12	-5837.12	-767.84	40°11'2.8687"N	104°30'17.6145"W	0.17	66.65	-0.03	-0.17	
11650.00	89.880	180.600	6740.35	5974.86	-5932.12	-768.47	40°11'1.9301"N	104°30'17.6364"W	0.50	-145.95	0.20	0.46	
11745.00	88.800	179.870	6741.44	6069.57	-6027.11	-768.86	40°11'0.9915"N	104°30'17.6551"W	1.37	30.62	-1.14	-0.77	
11840.00	89.290	180.160	6743.03	6164.24	-6122.10	-768.88	40°11'0.0529"N	104°30'17.6692"W	0.60	-40.33	0.52	0.31	
11935.00	90.150	179.430	6743.49	6258.90	-6217.10	-768.54	40°10'59.1141"N	104°30'17.6785"W	1.19	127.57	0.91	-0.77	
12029.00	89.850	179.820	6743.49	6352.54	-6311.09	-767.93	40°10'58.1852"N	104°30'17.6842"W	0.52	36.12	-0.32	0.41	
12124.00	90.220	180.090	6743.43	6447.22	-6406.09	-767.85	40°10'57.2465"N	104°30'17.6970"W	0.48	71.56	0.39	0.28	
12219.00	90.770	181.740	6742.61	6542.02	-6501.07	-769.37	40°10'56.3081"N	104°30'17.7303"W	1.83	-117.93	0.58	1.74	
12313.00	89.630	179.590	6742.28	6635.78	-6595.06	-770.46	40°10'55.3795"N	104°30'17.7579"W	2.59	24.78	-1.21	-2.29	
12408.00	90.280	179.890	6742.36	6730.43	-6690.06	-770.03	40°10'54.4408"N	104°30'17.7661"W	0.75	99.12	0.68	0.32	
12502.00	90.150	180.700	6742.01	6824.16	-6784.05	-770.51	40°10'53.5120"N	104°30'17.7859"W	0.87	-90.00	-0.14	0.86	
12597.00	90.150	179.700	6741.76	6918.87	-6879.05	-770.85	40°10'52.5733"N	104°30'17.8039"W	1.05	78.27	0.00	-1.05	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GUTTERSEN STATE D36-771
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.25-T03N-R64W	Wellbore	GUTTERSEN STATE D36-771 AWP
Slot	SLOT#30 GUTTERSEN STATE D36-771 (1268'FNL & 2035'FWL,SEC.25)		

### WELLPATH DATA (158 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
12786.00	90.370	180.760	6740.90	7107.31	-7068.05	-771.60	40°10'50.7059"N	104°30'17.8410"W	0.57	-106.12	0.12	0.56	
12881.00	90.000	179.480	6740.59	7202.01	-7163.04	-771.80	40°10'49.7672"N	104°30'17.8573"W	1.40	66.30	-0.39	-1.35	
12976.00	90.180	179.890	6740.44	7296.66	-7258.04	-771.28	40°10'48.8285"N	104°30'17.8643"W	0.47	-96.58	0.19	0.43	
13070.00	90.030	178.590	6740.27	7390.24	-7352.03	-770.03	40°10'47.8996"N	104°30'17.8618"W	1.39	-33.69	-0.16	-1.38	
13165.00	90.150	178.510	6740.12	7484.70	-7447.00	-767.63	40°10'46.9609"N	104°30'17.8446"W	0.15	97.12	0.13	-0.08	
13260.00	90.090	178.990	6739.92	7579.20	-7541.98	-765.56	40°10'46.0221"N	104°30'17.8316"W	0.51	-106.70	-0.06	0.51	
13354.00	89.970	178.590	6739.87	7672.71	-7635.96	-763.57	40°10'45.0933"N	104°30'17.8196"W	0.44	49.64	-0.13	-0.43	
13449.00	90.310	178.990	6739.64	7767.21	-7730.93	-761.57	40°10'44.1545"N	104°30'17.8075"W	0.55	-71.57	0.36	0.42	
13543.00	90.340	178.900	6739.11	7860.74	-7824.92	-759.84	40°10'43.2257"N	104°30'17.7988"W	0.10	-101.31	0.03	-0.10	
13638.00	89.820	176.300	6738.98	7955.02	-7919.83	-755.86	40°10'42.2874"N	104°30'17.7613"W	2.79	-82.57	-0.55	-2.74	
13733.00	89.910	175.610	6739.20	8048.93	-8014.59	-749.16	40°10'41.3503"N	104°30'17.6887"W	0.73	88.20	0.09	-0.73	
13827.00	90.120	182.270	6739.18	8142.41	-8108.52	-747.42	40°10'40.4219"N	104°30'17.6799"W	7.09	-79.58	0.22	7.09	
13922.00	90.280	181.400	6738.84	8237.29	-8203.47	-750.46	40°10'39.4840"N	104°30'17.7328"W	0.93	-90.00	0.17	-0.92	
14017.00	90.280	180.620	6738.38	8332.10	-8298.45	-752.14	40°10'38.5456"N	104°30'17.7681"W	0.82	-152.15	0.00	-0.82	
14111.00	89.750	180.340	6738.36	8425.85	-8392.45	-752.92	40°10'37.6169"N	104°30'17.7918"W	0.64	58.24	-0.56	-0.30	
14206.00	89.880	180.550	6738.66	8520.60	-8487.44	-753.66	40°10'36.6783"N	104°30'17.8150"W	0.26	-104.74	0.14	0.22	
14300.00	89.780	180.170	6738.94	8614.34	-8581.44	-754.25	40°10'35.7495"N	104°30'17.8362"W	0.42	105.71	-0.11	-0.40	
14395.00	89.690	180.490	6739.38	8709.07	-8676.44	-754.80	40°10'34.8109"N	104°30'17.8570"W	0.35	109.44	-0.09	0.34	
14490.00	89.630	180.660	6739.94	8803.82	-8771.43	-755.75	40°10'33.8723"N	104°30'17.8830"W	0.19	-93.47	-0.06	0.18	
14584.00	89.570	179.670	6740.60	8897.53	-8865.43	-756.02	40°10'32.9435"N	104°30'17.9001"W	1.06	71.57	-0.06	-1.05	
14679.00	89.880	180.600	6741.06	8992.24	-8960.43	-756.25	40°10'32.0049"N	104°30'17.9167"W	1.03	-163.30	0.33	0.98	
14774.00	89.780	180.570	6741.34	9087.00	-9055.42	-757.22	40°10'31.0663"N	104°30'17.9430"W	0.11	0.00	-0.11	-0.03	LAST BH MWD SURVEY
14802.00‡	89.780	180.570	6741.45	9114.93	-9083.42	-757.50	40°10'30.7896"N	104°30'17.9506"W	0.00		0.00	0.00	PROJECTION TO BIT

### HOLE & CASING SECTIONS - Ref Wellbore: GUTTERSEN STATE D36-771 AWP Ref Wellpath: GUTTERSEN STATE D36-771 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	1949.00	1919.00	30.00	1948.93	-0.01	-0.01	-9.15	0.91
9.625in Casing Surface	30.00	1949.00	1919.00	30.00	1948.93	-0.01	-0.01	-9.15	0.91
8.5in Open Hole	1949.00	14802.00	12853.00	1948.93	6741.45	-9.15	0.91	-9083.42	-757.50

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN STATE D36-771
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.25-T03N-R64W	Wellbore	GUTTERSEN STATE D36-771 AWB
Slot	SLOT#30 GUTTERSEN STATE D36-771 (1268'FNL & 2035'FWL,SEC.25)		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
GUTTERSEN STATE D36-771 BHL REV-1 (200'FSL & 1250'FWL, SEC.36)	6742.00	-9089.12	-738.07	3278054.04	1308229.52	40°10'30.7312"N	104°30'17.7012"W	point
GUTTERSEN STATE D36-771 TPZ REV-1 (2430'FSL & 1250'FWL, SEC.25)	6742.00	-1586.02	-770.14	3278021.97	1315732.28	40°11'44.8757"N	104°30'17.0294"W	point
SECTION LINES - SEC.25-T03N-R64	7015.00	1236.88	-2047.01	3276745.16	1318555.06	40°12'12.9111"N	104°30'33.0764"W	polygon
2D Polygon: dimensions not calculated								
SECTION LINES - SEC.36-T03N-R64	7015.00	-4033.88	-1994.79	3276797.38	1313284.53	40°11'20.8230"N	104°30'33.1624"W	polygon
2D Polygon: dimensions not calculated								

WELLPATH COMPOSITION - Ref Wellbore: GUTTERSEN STATE D36-771 AWB						Ref Wellpath: GUTTERSEN STATE D36-771 AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore		Survey Date
0.00	1939.00	Gyrodata 2015 - GC+DROP+COND	Gyrodata 2015 - GC+DROP+COND 13-1/2" <80 - 1939>		GUTTERSEN STATE D36-771 AWB		6/15/2020
1939.00	14802.00	OWSG MWD rev2 (MS+IFR1) NOBLE	OWSG MWD Rev2 (MS+IFR1) NOBLE 8-1/2" <1995 - 14774>		GUTTERSEN STATE D36-771 AWB		6/15/2020



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GUTTERSEN STATE D36-771
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.25-T03N-R64W	Wellbore	GUTTERSEN STATE D36-771 AWB
Slot	SLOT#30 GUTTERSEN STATE D36-771 (1268'FNL & 2035'FWL,SEC.25)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
80.00	0.160	250.140	80.00	FIRST GYRODATA SURVEY
1939.00	0.300	236.200	1938.93	LAST GYRODATA SURVEY
1995.00	0.540	230.690	1994.93	FIRST BH MWD SURVEY
14774.00	89.780	180.570	6741.34	LAST BH MWD SURVEY
14802.00	89.780	180.570	6741.45	PROJECTION TO BIT