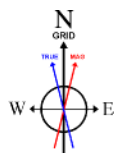


# NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#28 MOSER H34-735 (345°FNL & 1891°FEL, SEC.27)  
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: MOSER H34-735  
Facility: SEC.27-T03N-R65W Wellbore: MOSER H34-735 PWB

API # 05-123-40860

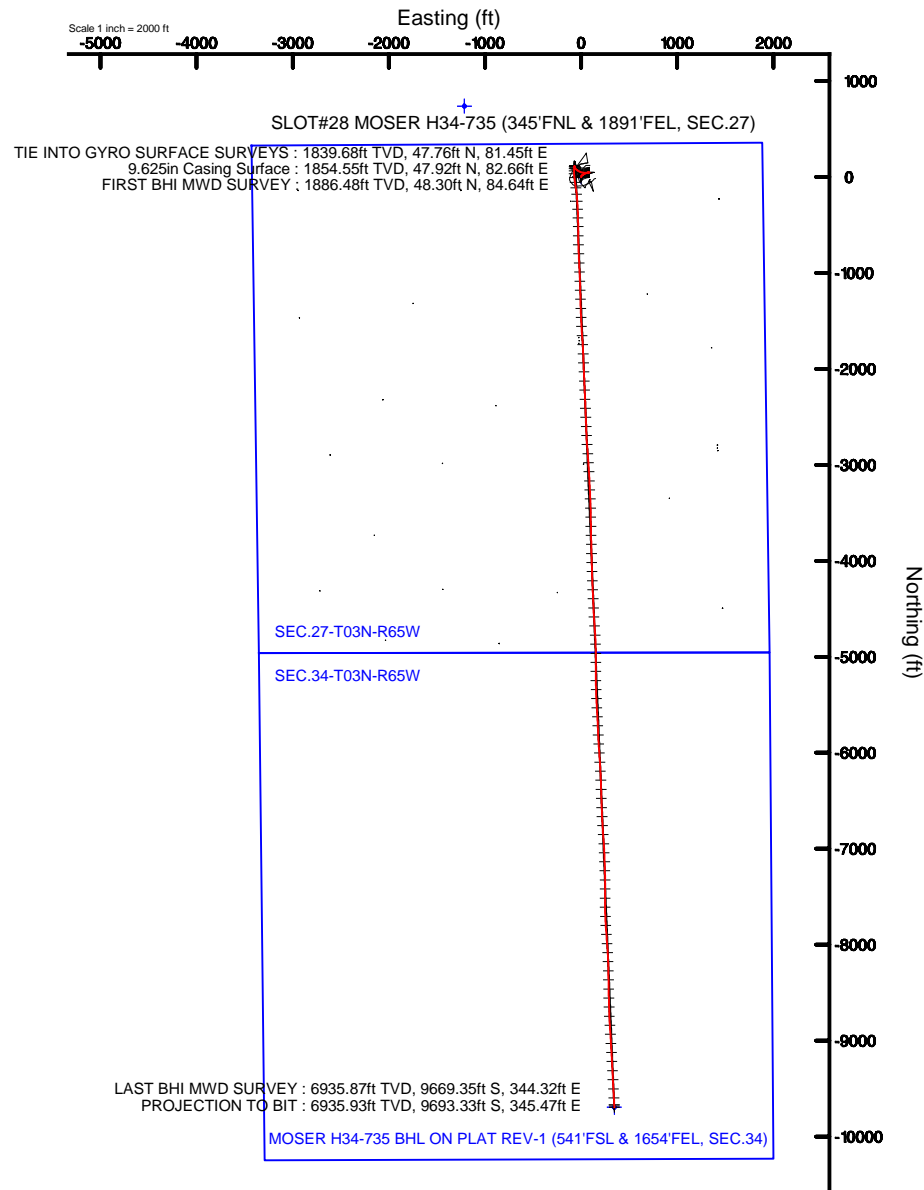
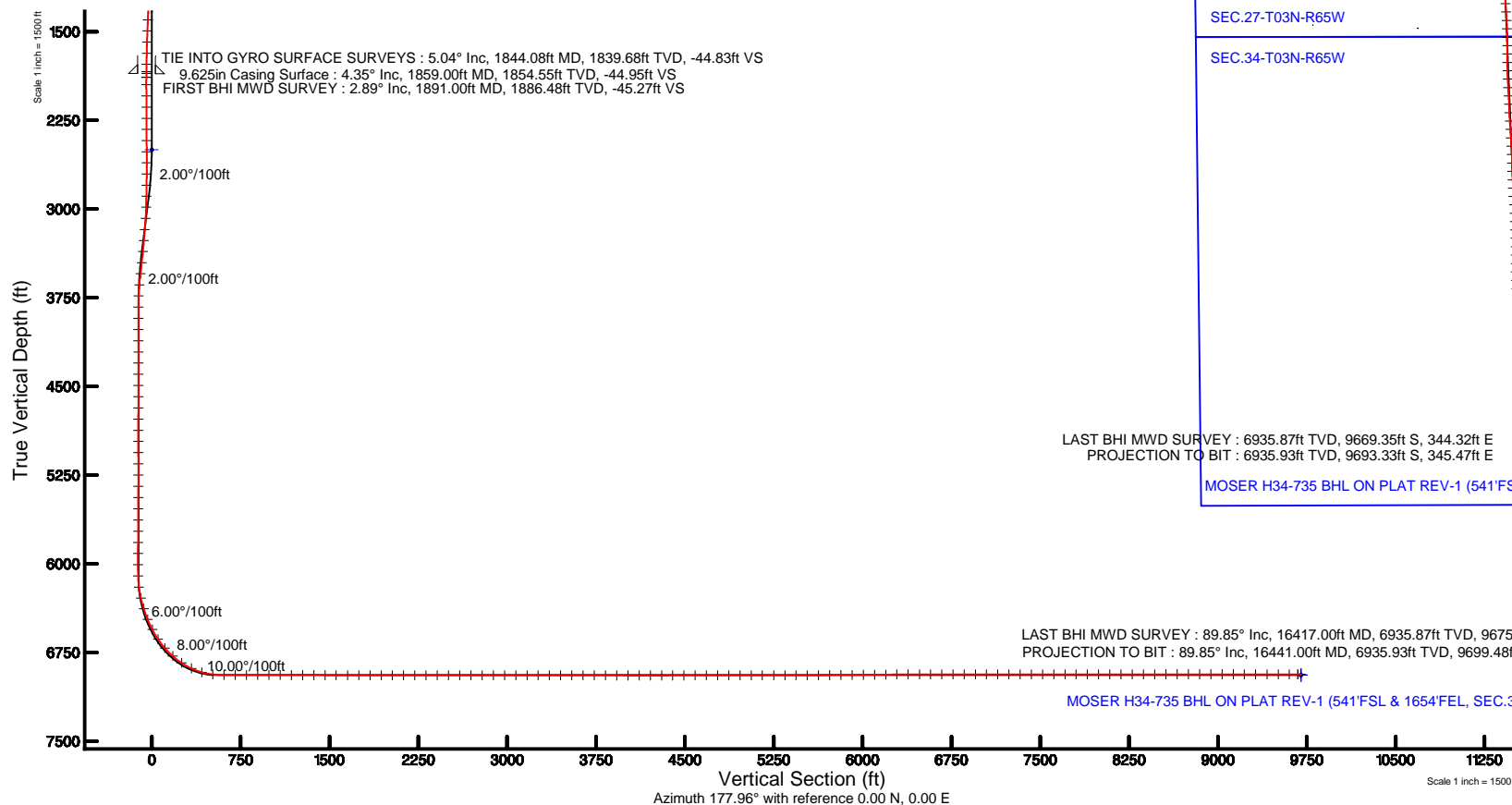
Plot reference wellpath is MOSER H34-735 (REV-A.0) PWB	
True vertical depths are referenced to H&P 321 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 321 (RKB)	North Reference: Grid north
H&P 321 (RKB) to Mean Sea Level: 4841 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#28 MOSER H34-735 (345°FNL & 1891°FEL, SEC.27)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: adamkat on 1/29/2016



BGGM (1945.0 to 2017.0) Dip: 66.82° Field: 52488.9 nT  
Magnetic North is 8.44 degrees East of True North (at 12/14/2015)  
Grid North is 0.55 degrees East of True North  
To correct azimuth from True to Grid subtract 0.55 degrees  
To correct azimuth from Magnetic to Grid add 7.89 degrees

**ne** noble energy

**BAKER  
HUGHES**





# Actual Wellpath Report

MOSER H34-735 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#28 MOSER H34-735 (345'FNL & 1891'FEL, SEC.27)
Area	COLORADO	Well	MOSER H34-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	MOSER H34-735 AWB
Facility	SEC.27-T03N-R65W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.1.1
North Reference	Grid	User	Adamkat
Scale	0.999957	Report Generated	1/29/2016 at 2:18:33 PM
Convergence at slot	0.55° East	Database/Source file	WA_DEN_Denver_Defn/MOSER_H34-735_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	229.14	-1434.41	3238254.26	1317831.95	40°12'09.720"N	104°38'49.236"W
Facility Reference Pt			3239688.60	1317602.82	40°12'07.319"N	104°38'30.779"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.315"N	105°30'00.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	H&P 321 (RKB) to Facility Vertical Datum	4841.00ft
Horizontal Reference Pt	Slot	H&P 321 (RKB) to Mean Sea Level	4841.00ft
Vertical Reference Pt	H&P 321 (RKB)	H&P 321 (RKB) to Mud Line at Slot (SLOT#28 MOSER H34-735 (345'FNL & 1891'FEL, SEC.27))	4841.00ft
MD Reference Pt	H&P 321 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	177.96°



# Actual Wellpath Report

MOSER H34-735 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#28 MOSER H34-735 (345'FNL & 1891'FEL, SEC.27)
Area	COLORADO	Well	MOSER H34-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	MOSER H34-735 AWP
Facility	SEC.27-T03N-R65W		

## WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	223.220	0.00	0.00	0.00	0.00	40°12'09.720"N	104°38'49.236"W	0.00	
83.23	0.210	223.220	83.23	0.11	-0.11	-0.10	40°12'09.719"N	104°38'49.237"W	0.25	
177.53	0.200	194.440	177.53	0.39	-0.40	-0.26	40°12'09.716"N	104°38'49.239"W	0.11	
269.04	0.180	259.830	269.04	0.56	-0.58	-0.45	40°12'09.714"N	104°38'49.242"W	0.23	
361.36	0.180	306.140	361.36	0.49	-0.52	-0.70	40°12'09.715"N	104°38'49.245"W	0.15	
456.13	0.430	351.740	456.13	0.05	-0.08	-0.88	40°12'09.719"N	104°38'49.247"W	0.35	
550.84	0.890	1.780	550.83	-1.04	1.01	-0.90	40°12'09.730"N	104°38'49.248"W	0.50	
645.71	1.420	7.120	645.68	-2.94	2.91	-0.74	40°12'09.749"N	104°38'49.245"W	0.57	
740.37	1.820	22.160	740.30	-5.47	5.47	-0.02	40°12'09.774"N	104°38'49.236"W	0.61	
834.91	2.500	32.890	834.78	-8.53	8.59	1.66	40°12'09.805"N	104°38'49.214"W	0.83	
929.60	3.030	41.410	929.36	-12.04	12.20	4.44	40°12'09.840"N	104°38'49.177"W	0.71	
1024.18	3.960	49.440	1023.76	-15.89	16.20	8.57	40°12'09.879"N	104°38'49.123"W	1.11	
1118.85	4.710	54.640	1118.16	-20.06	20.58	14.23	40°12'09.922"N	104°38'49.050"W	0.89	
1213.40	5.700	59.680	1212.32	-24.41	25.19	21.45	40°12'09.967"N	104°38'48.956"W	1.15	
1308.08	5.760	61.690	1306.52	-28.75	29.82	29.69	40°12'10.012"N	104°38'48.850"W	0.22	
1402.73	6.180	65.120	1400.66	-32.83	34.22	38.49	40°12'10.054"N	104°38'48.736"W	0.58	
1497.28	5.990	68.270	1494.68	-36.46	38.18	47.69	40°12'10.093"N	104°38'48.617"W	0.41	
1591.95	6.270	70.070	1588.81	-39.72	41.77	57.14	40°12'10.127"N	104°38'48.494"W	0.36	
1686.59	6.000	74.600	1682.91	-42.45	44.85	66.77	40°12'10.157"N	104°38'48.370"W	0.59	
1781.24	5.310	80.010	1777.10	-44.20	46.92	75.85	40°12'10.176"N	104°38'48.253"W	0.92	
1844.08	5.040	83.150	1839.68	-44.83	47.76	81.45	40°12'10.184"N	104°38'48.180"W	0.62	TIE INTO GYRO SURFACE SURVEYS
1891.00	2.890	75.200	1886.48	-45.27	48.30	84.64	40°12'10.189"N	104°38'48.139"W	4.72	FIRST BHI MWD SURVEY
1954.00	0.150	223.750	1949.46	-45.56	48.65	86.12	40°12'10.193"N	104°38'48.120"W	4.79	
2049.00	0.570	240.760	2044.46	-45.26	48.33	85.62	40°12'10.189"N	104°38'48.127"W	0.45	
2143.00	2.010	248.930	2138.43	-44.50	47.51	83.68	40°12'10.182"N	104°38'48.152"W	1.54	
2238.00	2.830	259.200	2233.35	-43.60	46.47	79.82	40°12'10.172"N	104°38'48.202"W	0.97	
2332.00	3.520	265.660	2327.20	-43.13	45.82	74.66	40°12'10.166"N	104°38'48.268"W	0.83	
2427.00	4.100	267.710	2421.99	-43.00	45.46	68.36	40°12'10.163"N	104°38'48.349"W	0.63	
2522.00	4.010	267.190	2516.75	-42.94	45.16	61.65	40°12'10.160"N	104°38'48.436"W	0.10	
2616.00	5.910	266.600	2610.40	-42.78	44.71	53.54	40°12'10.157"N	104°38'48.541"W	2.02	
2711.00	6.900	269.610	2704.80	-42.83	44.38	42.95	40°12'10.155"N	104°38'48.677"W	1.10	
2805.00	6.730	272.760	2798.14	-43.45	44.61	31.80	40°12'10.158"N	104°38'48.821"W	0.44	
2900.00	8.580	276.770	2892.29	-45.00	45.72	19.20	40°12'10.170"N	104°38'48.983"W	2.03	
2994.00	8.620	280.530	2985.23	-47.61	47.83	5.31	40°12'10.192"N	104°38'49.162"W	0.60	
3089.00	8.390	292.250	3079.20	-52.01	51.75	-8.10	40°12'10.232"N	104°38'49.334"W	1.84	
3184.00	8.510	298.450	3173.17	-58.43	57.73	-20.70	40°12'10.292"N	104°38'49.496"W	0.97	
3278.00	9.020	302.100	3266.07	-66.09	64.96	-33.06	40°12'10.365"N	104°38'49.654"W	0.80	
3373.00	9.180	306.970	3359.87	-75.04	73.47	-45.42	40°12'10.450"N	104°38'49.812"W	0.83	
3468.00	7.430	318.440	3453.88	-84.55	82.63	-55.55	40°12'10.542"N	104°38'49.942"W	2.53	
3562.00	7.220	337.270	3547.13	-94.76	92.62	-61.87	40°12'10.641"N	104°38'50.022"W	2.55	
3657.00	5.370	347.700	3641.55	-104.72	102.47	-65.12	40°12'10.739"N	104°38'50.063"W	2.28	
3751.00	2.320	332.420	3735.33	-110.77	108.46	-66.94	40°12'10.798"N	104°38'50.085"W	3.39	
3846.00	0.070	21.090	3830.31	-112.56	110.22	-67.81	40°12'10.816"N	104°38'50.096"W	2.39	
3941.00	0.090	275.890	3925.31	-112.62	110.28	-67.86	40°12'10.816"N	104°38'50.097"W	0.13	
4035.00	0.030	106.750	4019.31	-112.63	110.28	-67.91	40°12'10.816"N	104°38'50.098"W	0.13	



# Actual Wellpath Report

MOSER H34-735 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#28 MOSER H34-735 (345'FNL & 1891'FEL, SEC.27)
Area	COLORADO	Well	MOSER H34-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	MOSER H34-735 AWP
Facility	SEC.27-T03N-R65W		

## WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4130.00	0.130	119.570	4114.31	-112.56	110.22	-67.79	40°12'10.816"N	104°38'50.096"W	0.11	
4225.00	0.040	170.590	4209.31	-112.47	110.14	-67.69	40°12'10.815"N	104°38'50.095"W	0.12	
4319.00	0.130	354.600	4303.31	-112.55	110.21	-67.70	40°12'10.815"N	104°38'50.095"W	0.18	
4414.00	0.070	139.350	4398.31	-112.61	110.27	-67.67	40°12'10.816"N	104°38'50.094"W	0.20	
4509.00	0.110	316.830	4493.31	-112.63	110.29	-67.70	40°12'10.816"N	104°38'50.095"W	0.19	
4604.00	0.100	236.800	4588.31	-112.66	110.32	-67.83	40°12'10.817"N	104°38'50.096"W	0.14	
4698.00	0.190	11.150	4682.31	-112.77	110.42	-67.87	40°12'10.818"N	104°38'50.097"W	0.29	
4793.00	0.060	67.790	4777.31	-112.94	110.60	-67.79	40°12'10.819"N	104°38'50.096"W	0.17	
4888.00	0.110	35.090	4872.31	-113.03	110.69	-67.69	40°12'10.820"N	104°38'50.095"W	0.07	
4982.00	0.150	108.320	4966.31	-113.06	110.73	-67.52	40°12'10.821"N	104°38'50.092"W	0.17	
5077.00	0.110	205.990	5061.30	-112.93	110.60	-67.44	40°12'10.819"N	104°38'50.091"W	0.21	
5172.00	0.190	253.130	5156.30	-112.81	110.48	-67.63	40°12'10.818"N	104°38'50.094"W	0.15	
5266.00	0.250	259.360	5250.30	-112.74	110.39	-67.99	40°12'10.817"N	104°38'50.098"W	0.07	
5361.00	0.280	303.280	5345.30	-112.84	110.48	-68.38	40°12'10.818"N	104°38'50.104"W	0.21	
5456.00	0.190	326.890	5440.30	-113.11	110.74	-68.66	40°12'10.821"N	104°38'50.107"W	0.14	
5551.00	0.440	321.750	5535.30	-113.54	111.16	-68.97	40°12'10.825"N	104°38'50.111"W	0.26	
5645.00	0.440	311.220	5629.30	-114.08	111.68	-69.47	40°12'10.830"N	104°38'50.117"W	0.09	
5740.00	0.690	325.370	5724.29	-114.81	112.39	-70.07	40°12'10.837"N	104°38'50.125"W	0.30	
5835.00	0.180	296.300	5819.29	-115.37	112.93	-70.53	40°12'10.843"N	104°38'50.131"W	0.57	
5929.00	0.070	8.770	5913.29	-115.49	113.05	-70.65	40°12'10.844"N	104°38'50.132"W	0.18	
6024.00	0.130	274.310	6008.29	-115.56	113.12	-70.75	40°12'10.844"N	104°38'50.134"W	0.16	
6119.00	0.540	196.960	6103.29	-115.15	112.70	-70.99	40°12'10.840"N	104°38'50.137"W	0.55	
6214.00	7.830	187.970	6197.97	-108.34	105.85	-72.02	40°12'10.773"N	104°38'50.151"W	7.68	
6308.00	13.390	184.050	6290.33	-91.20	88.64	-73.68	40°12'10.603"N	104°38'50.174"W	5.96	
6403.00	17.260	180.210	6381.94	-66.17	63.56	-74.50	40°12'10.355"N	104°38'50.188"W	4.21	
6497.00	21.780	175.260	6470.52	-34.80	32.22	-73.11	40°12'10.045"N	104°38'50.174"W	5.12	
6592.00	27.660	173.760	6556.77	4.83	-7.30	-69.26	40°12'09.654"N	104°38'50.129"W	6.22	
6687.00	34.040	172.360	6638.29	53.34	-55.62	-63.32	40°12'09.176"N	104°38'50.059"W	6.76	
6781.00	40.880	171.410	6712.86	110.15	-112.18	-55.22	40°12'08.617"N	104°38'49.962"W	7.30	
6876.00	48.670	173.820	6780.25	176.72	-178.49	-46.72	40°12'07.961"N	104°38'49.860"W	8.39	
6971.00	56.200	176.390	6838.14	251.86	-253.46	-40.39	40°12'07.219"N	104°38'49.788"W	8.21	
7066.00	64.780	177.790	6884.89	334.45	-335.95	-36.24	40°12'06.404"N	104°38'49.745"W	9.12	
7161.00	74.100	178.000	6918.22	423.30	-424.74	-32.98	40°12'05.526"N	104°38'49.714"W	9.81	
7255.00	83.840	178.920	6936.18	515.45	-516.86	-30.51	40°12'04.616"N	104°38'49.693"W	10.41	
7350.00	89.900	179.750	6941.36	610.24	-611.67	-29.41	40°12'03.679"N	104°38'49.691"W	6.44	
7445.00	90.080	178.820	6941.38	705.21	-706.66	-28.23	40°12'02.740"N	104°38'49.687"W	1.00	
7539.00	90.200	177.320	6941.15	799.21	-800.60	-25.06	40°12'01.811"N	104°38'49.658"W	1.60	
7634.00	90.050	177.320	6940.94	894.20	-895.50	-20.62	40°12'00.873"N	104°38'49.613"W	0.16	
7729.00	89.680	177.490	6941.17	989.19	-990.40	-16.32	40°11'59.935"N	104°38'49.569"W	0.43	
7824.00	89.740	177.710	6941.65	1084.19	-1085.32	-12.34	40°11'58.997"N	104°38'49.530"W	0.24	
7918.00	89.770	178.710	6942.05	1178.19	-1179.27	-9.41	40°11'58.068"N	104°38'49.503"W	1.06	
8013.00	90.110	178.620	6942.15	1273.18	-1274.24	-7.19	40°11'57.129"N	104°38'49.487"W	0.37	
8108.00	90.020	177.860	6942.04	1368.18	-1369.20	-4.27	40°11'56.191"N	104°38'49.461"W	0.81	
8203.00	89.740	177.450	6942.24	1463.18	-1464.12	-0.39	40°11'55.252"N	104°38'49.422"W	0.52	
8297.00	89.740	177.130	6942.67	1557.17	-1558.01	4.06	40°11'54.324"N	104°38'49.377"W	0.34	



# Actual Wellpath Report

MOSER H34-735 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#28 MOSER H34-735 (345'FNL & 1891'FEL, SEC.27)
Area	COLORADO	Well	MOSER H34-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	MOSER H34-735 AWP
Facility	SEC.27-T03N-R65W		

## WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8392.00	89.680	175.440	6943.15	1652.12	-1652.81	10.21	40°11'53.387"N	104°38'49.309"W	1.78	
8487.00	89.740	176.610	6943.63	1747.07	-1747.57	16.80	40°11'52.450"N	104°38'49.236"W	1.23	
8582.00	90.110	177.720	6943.75	1842.06	-1842.46	21.50	40°11'51.512"N	104°38'49.187"W	1.23	
8677.00	89.960	178.120	6943.70	1937.06	-1937.39	24.94	40°11'50.573"N	104°38'49.155"W	0.45	
8771.00	90.020	177.340	6943.71	2031.05	-2031.32	28.67	40°11'49.645"N	104°38'49.118"W	0.83	
8866.00	90.020	177.680	6943.68	2126.05	-2126.23	32.79	40°11'48.707"N	104°38'49.077"W	0.36	
8961.00	90.020	177.610	6943.65	2221.05	-2221.15	36.70	40°11'47.768"N	104°38'49.038"W	0.07	
9056.00	90.080	177.350	6943.56	2316.05	-2316.06	40.88	40°11'46.830"N	104°38'48.996"W	0.28	
9150.00	90.080	177.920	6943.43	2410.04	-2409.98	44.75	40°11'45.902"N	104°38'48.958"W	0.61	
9245.00	89.980	177.580	6943.38	2505.04	-2504.90	48.48	40°11'44.963"N	104°38'48.922"W	0.37	
9340.00	89.980	177.790	6943.41	2600.04	-2599.83	52.32	40°11'44.025"N	104°38'48.884"W	0.22	
9434.00	90.040	178.010	6943.40	2694.04	-2693.76	55.77	40°11'43.096"N	104°38'48.851"W	0.24	
9529.00	90.040	175.330	6943.33	2789.01	-2788.59	61.28	40°11'42.159"N	104°38'48.792"W	2.82	
9624.00	89.920	175.750	6943.36	2883.92	-2883.30	68.67	40°11'41.222"N	104°38'48.709"W	0.46	
9718.00	89.890	176.170	6943.52	2977.87	-2977.07	75.29	40°11'40.295"N	104°38'48.635"W	0.45	
9813.00	89.830	176.690	6943.75	3072.83	-3071.89	81.21	40°11'39.357"N	104°38'48.570"W	0.55	
9908.00	89.860	177.150	6944.01	3167.82	-3166.75	86.31	40°11'38.419"N	104°38'48.516"W	0.49	
10002.00	90.070	177.360	6944.07	3261.81	-3260.64	90.82	40°11'37.491"N	104°38'48.470"W	0.32	
10097.00	90.070	177.700	6943.95	3356.80	-3355.55	94.91	40°11'36.553"N	104°38'48.429"W	0.36	
10192.00	89.950	178.480	6943.93	3451.80	-3450.50	98.08	40°11'35.614"N	104°38'48.400"W	0.83	
10286.00	90.010	178.750	6943.97	3545.80	-3544.47	100.35	40°11'34.686"N	104°38'48.382"W	0.29	
10381.00	89.860	179.470	6944.08	3640.78	-3639.46	101.82	40°11'33.747"N	104°38'48.375"W	0.77	
10476.00	89.950	178.710	6944.23	3735.76	-3734.45	103.33	40°11'32.808"N	104°38'48.367"W	0.81	
10570.00	89.890	178.680	6944.36	3829.75	-3828.42	105.47	40°11'31.879"N	104°38'48.351"W	0.07	
10665.00	89.890	178.630	6944.55	3924.74	-3923.39	107.70	40°11'30.941"N	104°38'48.335"W	0.05	
10760.00	89.890	178.290	6944.73	4019.74	-4018.36	110.26	40°11'30.002"N	104°38'48.313"W	0.36	
10854.00	89.920	178.440	6944.88	4113.74	-4112.32	112.94	40°11'29.073"N	104°38'48.291"W	0.16	
10949.00	89.980	177.850	6944.97	4208.74	-4207.27	116.01	40°11'28.135"N	104°38'48.263"W	0.62	
11044.00	90.160	177.410	6944.85	4303.73	-4302.19	119.94	40°11'27.196"N	104°38'48.224"W	0.50	
11138.00	90.040	177.300	6944.69	4397.73	-4396.09	124.28	40°11'26.268"N	104°38'48.180"W	0.17	
11233.00	90.100	177.280	6944.57	4492.72	-4490.98	128.77	40°11'25.330"N	104°38'48.133"W	0.07	
11328.00	90.160	176.750	6944.36	4587.71	-4585.85	133.72	40°11'24.392"N	104°38'48.081"W	0.56	
11422.00	90.160	175.940	6944.09	4681.67	-4679.66	139.71	40°11'23.465"N	104°38'48.016"W	0.86	
11517.00	90.060	176.530	6943.91	4776.63	-4774.46	145.95	40°11'22.527"N	104°38'47.947"W	0.63	
11611.00	89.940	178.080	6943.91	4870.62	-4868.35	150.37	40°11'21.599"N	104°38'47.902"W	1.65	
11706.00	90.000	179.160	6943.96	4965.61	-4963.32	152.66	40°11'20.660"N	104°38'47.884"W	1.14	
11801.00	90.000	179.930	6943.96	5060.57	-5058.32	153.41	40°11'19.722"N	104°38'47.886"W	0.81	
11895.00	90.030	179.920	6943.94	5154.52	-5152.32	153.53	40°11'18.793"N	104°38'47.896"W	0.03	
11990.00	90.000	179.690	6943.91	5249.47	-5247.32	153.86	40°11'17.854"N	104°38'47.904"W	0.24	
12085.00	89.880	178.580	6944.01	5344.45	-5342.30	155.29	40°11'16.915"N	104°38'47.897"W	1.18	
12179.00	89.880	177.240	6944.21	5438.44	-5436.24	158.72	40°11'15.987"N	104°38'47.865"W	1.43	
12274.00	90.550	176.760	6943.85	5533.43	-5531.11	163.69	40°11'15.049"N	104°38'47.812"W	0.87	
12369.00	90.460	176.910	6943.01	5628.41	-5625.96	168.94	40°11'14.111"N	104°38'47.757"W	0.18	
12463.00	90.520	177.560	6942.21	5722.40	-5719.84	173.47	40°11'13.183"N	104°38'47.710"W	0.69	
12558.00	90.580	177.390	6941.30	5817.39	-5814.75	177.65	40°11'12.245"N	104°38'47.668"W	0.19	



# Actual Wellpath Report

MOSER H34-735 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#28 MOSER H34-735 (345'FNL & 1891'FEL, SEC.27)
Area	COLORADO	Well	MOSER H34-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	MOSER H34-735 AWP
Facility	SEC.27-T03N-R65W		

## WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12653.00	90.490	176.570	6940.41	5912.37	-5909.61	182.66	40°11'11.307"N	104°38'47.615"W	0.87	
12747.00	90.550	176.200	6939.56	6006.33	-6003.42	188.59	40°11'10.379"N	104°38'47.550"W	0.40	
12842.00	90.550	176.110	6938.65	6101.28	-6098.20	194.96	40°11'09.442"N	104°38'47.480"W	0.09	
12937.00	90.550	177.050	6937.73	6196.24	-6193.03	200.62	40°11'08.504"N	104°38'47.419"W	0.99	
13031.00	90.580	178.000	6936.81	6290.24	-6286.93	204.68	40°11'07.576"N	104°38'47.378"W	1.01	
13126.00	90.060	178.450	6936.28	6385.23	-6381.89	207.62	40°11'06.637"N	104°38'47.352"W	0.72	
13221.00	90.090	177.880	6936.15	6480.23	-6476.84	210.67	40°11'05.699"N	104°38'47.325"W	0.60	
13315.00	90.000	178.170	6936.08	6574.23	-6570.78	213.91	40°11'04.770"N	104°38'47.294"W	0.32	
13410.00	90.000	177.310	6936.08	6669.23	-6665.71	217.65	40°11'03.832"N	104°38'47.258"W	0.91	
13504.00	90.030	176.530	6936.05	6763.21	-6759.57	222.70	40°11'02.904"N	104°38'47.205"W	0.83	
13598.00	90.060	175.910	6935.98	6857.17	-6853.36	228.90	40°11'01.976"N	104°38'47.136"W	0.66	
13693.00	90.030	176.220	6935.91	6952.12	-6948.14	235.42	40°11'01.039"N	104°38'47.064"W	0.33	
13787.00	90.000	177.460	6935.88	7046.10	-7042.00	240.60	40°11'00.111"N	104°38'47.009"W	1.32	
13882.00	90.030	178.060	6935.86	7141.10	-7136.92	244.31	40°10'59.173"N	104°38'46.973"W	0.63	
13976.00	90.060	178.640	6935.78	7235.09	-7230.88	247.02	40°10'58.244"N	104°38'46.950"W	0.62	
14071.00	90.000	179.820	6935.73	7330.07	-7325.87	248.30	40°10'57.306"N	104°38'46.945"W	1.24	
14166.00	90.030	180.060	6935.71	7425.01	-7420.87	248.40	40°10'56.367"N	104°38'46.956"W	0.25	
14261.00	90.060	179.910	6935.63	7519.95	-7515.87	248.42	40°10'55.428"N	104°38'46.967"W	0.16	
14355.00	89.970	179.040	6935.61	7613.92	-7609.87	249.28	40°10'54.499"N	104°38'46.968"W	0.93	
14450.00	90.150	177.550	6935.51	7708.92	-7704.82	252.11	40°10'53.561"N	104°38'46.943"W	1.58	
14544.00	90.030	176.850	6935.36	7802.91	-7798.71	256.70	40°10'52.632"N	104°38'46.895"W	0.76	
14639.00	90.000	175.550	6935.34	7897.86	-7893.50	263.00	40°10'51.695"N	104°38'46.826"W	1.37	
14734.00	90.000	175.630	6935.34	7992.78	-7988.22	270.30	40°10'50.758"N	104°38'46.744"W	0.08	
14829.00	90.060	176.980	6935.29	8087.74	-8083.02	276.42	40°10'49.821"N	104°38'46.677"W	1.42	
14923.00	89.970	177.960	6935.26	8181.73	-8176.93	280.57	40°10'48.893"N	104°38'46.635"W	1.05	
15018.00	90.000	178.970	6935.29	8276.73	-8271.89	283.12	40°10'47.954"N	104°38'46.614"W	1.06	
15113.00	90.060	179.410	6935.24	8371.70	-8366.88	284.46	40°10'47.015"N	104°38'46.608"W	0.47	
15208.00	90.030	179.010	6935.16	8466.68	-8461.87	285.77	40°10'46.077"N	104°38'46.603"W	0.42	
15302.00	90.090	178.430	6935.06	8560.67	-8555.85	287.87	40°10'45.148"N	104°38'46.588"W	0.62	
15397.00	89.970	178.230	6935.01	8655.67	-8650.81	290.64	40°10'44.209"N	104°38'46.564"W	0.25	
15492.00	90.000	178.150	6935.04	8750.67	-8745.76	293.64	40°10'43.271"N	104°38'46.537"W	0.09	
15587.00	90.030	176.200	6935.01	8845.66	-8840.64	298.32	40°10'42.333"N	104°38'46.488"W	2.05	
15681.00	90.030	176.270	6934.96	8939.61	-8934.44	304.49	40°10'41.405"N	104°38'46.421"W	0.07	
15776.00	90.030	176.870	6934.92	9034.59	-9029.27	310.18	40°10'40.467"N	104°38'46.359"W	0.63	
15871.00	89.850	176.910	6935.01	9129.57	-9124.13	315.33	40°10'39.530"N	104°38'46.304"W	0.19	
15965.00	89.880	176.860	6935.24	9223.55	-9217.99	320.44	40°10'38.602"N	104°38'46.250"W	0.06	
16060.00	89.910	176.730	6935.41	9318.53	-9312.84	325.75	40°10'37.664"N	104°38'46.194"W	0.14	
16155.00	89.940	177.320	6935.53	9413.52	-9407.71	330.68	40°10'36.726"N	104°38'46.142"W	0.62	
16250.00	89.910	176.840	6935.66	9508.51	-9502.59	335.52	40°10'35.788"N	104°38'46.091"W	0.51	
16344.00	89.970	176.940	6935.76	9602.49	-9596.45	340.62	40°10'34.860"N	104°38'46.037"W	0.12	
16417.00	89.850	177.250	6935.87	9675.48	-9669.35	344.32	40°10'34.139"N	104°38'45.999"W	0.46	LAST BHI MWD SURVEY
16441.00	89.850	177.250	6935.93	9699.48	-9693.33	345.47	40°10'33.902"N	104°38'45.987"W	0.00	PROJECTION TO BIT



# Actual Wellpath Report

MOSER H34-735 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#28 MOSER H34-735 (345'FNL & 1891'FEL, SEC.27)
Area	COLORADO	Well	MOSER H34-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	MOSER H34-735 AWB
Facility	SEC.27-T03N-R65W		

## HOLE & CASING SECTIONS - Ref Wellbore: MOSER H34-735 AWB Ref Wellpath: MOSER H34-735 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	1859.00	1829.00	30.00	1854.55	-0.01	-0.01	47.92	82.66
8.5in Open Hole	1859.00	16441.00	14582.00	1854.55	6935.93	47.92	82.66	-9693.33	345.47

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.27-T03N-R65W	1.00	738.84	-1213.85	3237040.46	1318570.76	40°12'17.136"N	104°39'04.788"W	polygon
SEC.34-T03N-R65W	1.00	738.84	-1213.85	3237040.46	1318570.76	40°12'17.136"N	104°39'04.788"W	polygon
MOSER H34-735 KOP (35' RADII)	2500.00	0.00	0.00	3238254.26	1317831.95	40°12'09.720"N	104°38'49.236"W	point
MOSER H34-735 BHL ON PLAT REV-1 (541'FSL & 1654'FEL, SEC.34)	6942.00	-9694.77	344.77	3238599.01	1308137.62	40°10'33.888"N	104°38'45.996"W	point
MOSER H34-735 DRILLING COORIDOR (35' L/R & 8' U/D)	6942.00	-9694.77	344.77	3238599.01	1308137.62	40°10'33.888"N	104°38'45.996"W	polygon

## WELLPATH COMPOSITION - Ref Wellbore: MOSER H34-735 AWB Ref Wellpath: MOSER H34-735 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment
0.00	1844.08	Generic gyro - continuous (Standard)	GYRO SURFACE SURVEYS 13 1/2" <0 - 1844.08>
1844.08	6119.00	Custom NaviTrak (Short spacing) (AT Curve sf 0.01) (Rockies 0.03Gt model)	BHI MWD NAVITRAK (AT CURVE SHORT SPACING, MAGCORR) 8 1/2" MONOBORE VERTICAL <184
6119.00	16417.00	Custom NaviTrak (Short spacing) (AT Curve sf 0.01) (Rockies 0.03Gt model)	BHI MWD NAVITRAK (AT CURVE SHOR SPACING, MAGCORR) 8 1/2" MONOBORE CURVE/LATERAL
16417.00	16441.00	Blind Drilling (std)	Projection to bit



# Actual Wellpath Report

MOSER H34-735 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#28 MOSER H34-735 (345'FNL & 1891'FEL, SEC.27)
Area	COLORADO	Well	MOSER H34-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	MOSER H34-735 AWB
Facility	SEC.27-T03N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1844.08	5.040	83.150	1839.68	TIE INTO GYRO SURFACE SURVEYS
1891.00	2.890	75.200	1886.48	FIRST BHI MWD SURVEY
16417.00	89.850	177.250	6935.87	LAST BHI MWD SURVEY
16441.00	89.850	177.250	6935.93	PROJECTION TO BIT