

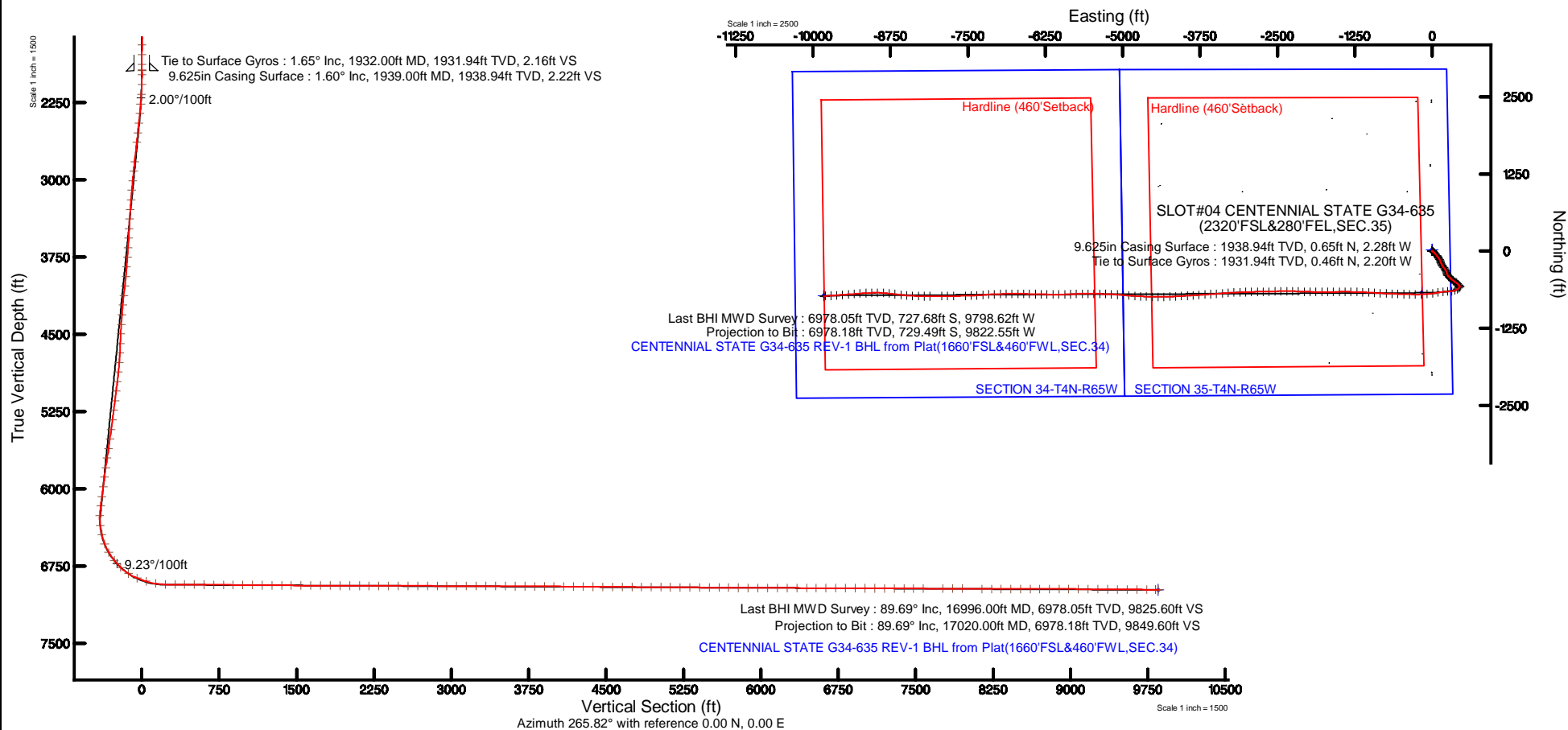
# NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)  
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: CENTENNIAL STATE G34-635  
Facility: SEC 35-T4N-R65W Wellbore: CENTENNIAL STATE G34-635 PWB



Also reference wellbore to CENTENNIAL STATE G34-635 (REV-1) A-10 PWB	Grid System: NAD83; Lambert Conformal Conic (NAD 83) US Nat
True vertical depths are referenced to RIG (2016) (1946)	True vertical depths are referenced to a different geoid datum
Measured depths are referenced to RIG (2016) (1946)	North Reference Grid north
RIG (2016) (1946) to Mean Sea Level: 4827 feet	Scale True distance
Mean Sea Level to Ground level (in State: SLOTHW CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35))	Depths are in feet
Coordinates are in feet referenced to Dat	Checked by: gander on 2016-03-01
	Drawn by: VLS, DSR, DSR, DSR
Comments	
SURFACE LOCATION: NESE	
40.26788N	
104.62202W	
API 05-123-44606	

Location Information					
Facility Name		Grid East (US N)	Grid North (US N)	Latitude	Longitude
SEC 35-T4N-R65W		334883.800	128635.000	40°15'44.532"N	104°27'13.584"W
Site	Local N (N)	Local E (E)	Grid East (US N)	Grid North (US N)	Latitude
SLOTHW CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)	230746	624	334883.800	128635.000	40°15'44.532"N
RIG (2016) (1946) to Ground level (in State: SLOTHW CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35))					4827ft
Mean Sea Level to Ground level (in State: SLOTHW CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35))					0ft
RIG (2016) (1946) to Mean Sea Level					4827ft





Actual Wellpath Report

CENTENNIAL STATE G34-635 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)
Area	COLORADO	Well	CENTENNIAL STATE G34-635
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	CENTENNIAL STATE G34-635 AWB
Facility	SEC.35-T04N-R65W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Guenaler
Scale	0.999957	Report Generated	3/1/2018 at 10:56:32 AM
Convergence at slot	0.57° East	Database/Source file	WA_DEN_Denver_Defn/CENTENNIAL_STATE_G34-635_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2007.46	5.24	3244999.06	1341643.03	40°16'04.368"N	104°37'19.272"W
Facility Reference Pt			3244993.82	1339635.66	40°15'44.532"N	104°37'19.596"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.315"N	105°30'00.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (30'KB) (RKB) to Facility Vertical Datum	4827.00ft
Horizontal Reference Pt	Slot	RIG (30'KB) (RKB) to Mean Sea Level	4827.00ft
Vertical Reference Pt	RIG (30'KB) (RKB)	RIG (30'KB) (RKB) to Ground Level at Slot (SLOT#04 CENTENNIAL STATE G34-635 (2320'FSL&280'FEL,SEC.35))	4827.00ft
MD Reference Pt	RIG (30'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	265.82°



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CENTENNIAL STATE G34-635 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)
Area	COLORADO	Well	CENTENNIAL STATE G34-635
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	CENTENNIAL STATE G34-635 AWB
Facility	SEC.35-T04N-R65W		

WELLPATH DATA (180 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	244.280	0.00	0.00	0.00	0.00	40°16'04.368"N	104°37'19.272"W	0.00	
82.00	0.390	244.280	82.00	0.26	-0.12	-0.25	40°16'04.367"N	104°37'19.275"W	0.48	
178.00	0.100	92.720	178.00	0.48	-0.27	-0.46	40°16'04.365"N	104°37'19.278"W	0.50	
270.00	0.230	209.920	270.00	0.50	-0.43	-0.47	40°16'04.364"N	104°37'19.278"W	0.31	
365.00	0.180	64.980	365.00	0.47	-0.53	-0.43	40°16'04.363"N	104°37'19.278"W	0.41	
459.00	0.200	214.180	459.00	0.44	-0.61	-0.39	40°16'04.362"N	104°37'19.277"W	0.39	
554.00	0.150	271.030	554.00	0.66	-0.74	-0.61	40°16'04.361"N	104°37'19.280"W	0.18	
648.00	0.210	296.580	648.00	0.93	-0.66	-0.89	40°16'04.362"N	104°37'19.284"W	0.11	
742.00	0.450	255.850	742.00	1.44	-0.67	-1.40	40°16'04.361"N	104°37'19.290"W	0.34	
837.00	0.620	232.980	836.99	2.24	-1.08	-2.17	40°16'04.358"N	104°37'19.300"W	0.28	
931.00	0.620	205.670	930.99	2.92	-1.84	-2.80	40°16'04.350"N	104°37'19.308"W	0.31	
1026.00	0.380	217.740	1025.98	3.39	-2.55	-3.21	40°16'04.343"N	104°37'19.314"W	0.27	
1120.00	0.320	230.960	1119.98	3.81	-2.96	-3.61	40°16'04.339"N	104°37'19.319"W	0.11	
1215.00	0.100	209.220	1214.98	4.08	-3.20	-3.85	40°16'04.337"N	104°37'19.322"W	0.24	
1309.00	0.120	5.510	1308.98	4.11	-3.18	-3.88	40°16'04.337"N	104°37'19.323"W	0.23	
1404.00	0.030	76.210	1403.98	4.06	-3.07	-3.85	40°16'04.338"N	104°37'19.322"W	0.12	
1498.00	0.150	244.950	1497.98	4.16	-3.12	-3.94	40°16'04.338"N	104°37'19.323"W	0.19	
1592.00	0.240	48.360	1591.98	4.11	-3.04	-3.90	40°16'04.338"N	104°37'19.323"W	0.41	
1687.00	0.970	66.730	1686.97	3.20	-2.59	-3.02	40°16'04.343"N	104°37'19.311"W	0.79	
1782.00	0.590	53.440	1781.97	2.02	-1.98	-1.88	40°16'04.349"N	104°37'19.297"W	0.44	
1876.00	1.120	343.660	1875.96	1.81	-0.81	-1.75	40°16'04.360"N	104°37'19.295"W	1.14	
1932.00	1.650	338.390	1931.94	2.16	0.46	-2.20	40°16'04.373"N	104°37'19.300"W	0.97	Tie to Surface Gyros
1978.00	1.350	346.800	1977.92	2.45	1.61	-2.57	40°16'04.384"N	104°37'19.305"W	0.81	
2072.00	2.540	109.820	2071.89	0.72	1.98	-0.86	40°16'04.388"N	104°37'19.283"W	3.69	
2167.00	3.860	121.570	2166.74	-3.80	-0.41	3.84	40°16'04.364"N	104°37'19.223"W	1.54	
2261.00	5.410	124.630	2260.43	-9.82	-4.58	10.18	40°16'04.322"N	104°37'19.141"W	1.67	
2356.00	7.990	131.340	2354.78	-17.94	-11.49	18.83	40°16'04.253"N	104°37'19.031"W	2.83	
2451.00	9.410	134.360	2448.68	-27.71	-21.28	29.34	40°16'04.155"N	104°37'18.896"W	1.57	
2545.00	10.340	136.560	2541.29	-38.13	-32.78	40.63	40°16'04.040"N	104°37'18.752"W	1.07	
2640.00	10.400	138.200	2634.74	-48.76	-45.36	52.21	40°16'03.915"N	104°37'18.604"W	0.32	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)
Area	COLORADO	Well	CENTENNIAL STATE G34-635
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	CENTENNIAL STATE G34-635 AWB
Facility	SEC.35-T04N-R65W		

WELLPATH DATA (180 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2829.00	10.380	140.460	2820.64	-69.03	-71.21	74.42	40°16'03.657"N	104°37'18.321"W	0.22	
2923.00	10.480	141.480	2913.09	-78.75	-84.43	85.13	40°16'03.525"N	104°37'18.185"W	0.22	
3018.00	10.260	145.360	3006.54	-87.91	-98.15	95.32	40°16'03.389"N	104°37'18.055"W	0.77	
3113.00	10.450	148.430	3099.99	-96.17	-112.45	104.64	40°16'03.247"N	104°37'17.937"W	0.61	
3207.00	10.390	149.150	3192.44	-103.89	-126.99	113.45	40°16'03.102"N	104°37'17.825"W	0.15	
3302.00	10.110	151.640	3285.92	-111.15	-141.69	121.81	40°16'02.956"N	104°37'17.719"W	0.55	
3396.00	9.800	158.130	3378.51	-116.96	-156.37	128.71	40°16'02.810"N	104°37'17.632"W	1.24	
3491.00	10.340	160.820	3472.05	-121.62	-171.93	134.52	40°16'02.656"N	104°37'17.559"W	0.75	
3585.00	10.240	156.700	3564.54	-126.54	-187.57	140.60	40°16'02.501"N	104°37'17.482"W	0.79	
3680.00	10.260	153.250	3658.02	-132.56	-202.88	147.74	40°16'02.349"N	104°37'17.392"W	0.65	
3774.00	10.530	153.480	3750.48	-139.03	-218.04	155.35	40°16'02.198"N	104°37'17.296"W	0.29	
3869.00	10.600	149.750	3843.87	-146.17	-233.35	163.62	40°16'02.046"N	104°37'17.191"W	0.72	
3963.00	10.610	145.530	3936.27	-154.34	-247.96	172.88	40°16'01.901"N	104°37'17.074"W	0.83	
4058.00	10.490	138.360	4029.66	-164.01	-261.63	183.57	40°16'01.765"N	104°37'16.937"W	1.39	
4152.00	10.590	138.940	4122.08	-174.40	-274.54	194.93	40°16'01.636"N	104°37'16.793"W	0.16	
4247.00	10.650	145.980	4215.46	-184.00	-288.40	205.58	40°16'01.498"N	104°37'16.657"W	1.37	
4341.00	10.610	150.600	4307.84	-192.01	-303.14	214.69	40°16'01.352"N	104°37'16.541"W	0.91	
4436.00	10.730	156.120	4401.20	-198.72	-318.84	222.56	40°16'01.196"N	104°37'16.442"W	1.08	
4530.00	10.620	160.830	4493.58	-203.91	-335.03	228.95	40°16'01.035"N	104°37'16.361"W	0.94	
4625.00	10.640	164.140	4586.95	-207.95	-351.73	234.22	40°16'00.869"N	104°37'16.296"W	0.64	
4719.00	10.680	159.140	4679.33	-212.21	-368.22	239.69	40°16'00.706"N	104°37'16.227"W	0.98	
4813.00	10.680	151.840	4771.70	-218.25	-384.04	246.91	40°16'00.549"N	104°37'16.136"W	1.44	
4908.00	10.600	143.500	4865.08	-226.50	-398.82	256.26	40°16'00.402"N	104°37'16.017"W	1.62	
5002.00	10.610	139.190	4957.47	-236.28	-412.32	267.06	40°16'00.268"N	104°37'15.880"W	0.84	
5097.00	10.470	133.620	5050.87	-247.30	-424.90	279.02	40°16'00.142"N	104°37'15.727"W	1.08	
5191.00	10.540	131.470	5143.30	-259.04	-436.48	291.65	40°16'00.026"N	104°37'15.566"W	0.42	
5285.00	10.670	131.190	5235.69	-271.17	-447.91	304.64	40°15'59.912"N	104°37'15.400"W	0.15	
5380.00	10.470	130.090	5329.08	-283.53	-459.26	317.86	40°15'59.799"N	104°37'15.230"W	0.30	
5475.00	10.580	130.210	5422.48	-295.94	-470.45	331.12	40°15'59.687"N	104°37'15.061"W	0.12	
5569.00	10.280	127.040	5514.93	-308.41	-481.07	344.41	40°15'59.581"N	104°37'14.891"W	0.69	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)
Area	COLORADO	Well	CENTENNIAL STATE G34-635
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	CENTENNIAL STATE G34-635 AWB
Facility	SEC.35-T04N-R65W		

WELLPATH DATA (180 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5664.00	10.570	123.910	5608.36	-321.65	-491.04	358.41	40°15'59.481"N	104°37'14.712"W	0.67	
5758.00	10.590	121.080	5700.76	-335.49	-500.31	372.96	40°15'59.388"N	104°37'14.525"W	0.55	
5853.00	10.550	126.570	5794.15	-349.20	-510.00	387.42	40°15'59.291"N	104°37'14.340"W	1.06	
5947.00	10.610	129.700	5886.56	-361.96	-520.65	400.99	40°15'59.184"N	104°37'14.166"W	0.61	
6041.00	10.350	130.430	5978.99	-374.21	-531.66	414.08	40°15'59.074"N	104°37'13.999"W	0.31	
6136.00	10.610	132.880	6072.40	-386.24	-543.14	426.98	40°15'58.959"N	104°37'13.834"W	0.54	
6231.00	10.600	137.700	6165.78	-397.59	-555.56	439.27	40°15'58.835"N	104°37'13.677"W	0.93	
6325.00	9.540	149.500	6258.34	-406.38	-568.66	449.04	40°15'58.705"N	104°37'13.552"W	2.46	
6420.00	10.710	228.210	6352.25	-402.87	-581.38	446.45	40°15'58.579"N	104°37'13.587"W	13.51	
6514.00	15.850	227.970	6443.71	-385.80	-595.81	430.39	40°15'58.438"N	104°37'13.796"W	5.47	
6609.00	23.450	232.830	6533.12	-359.66	-615.94	405.65	40°15'58.242"N	104°37'14.118"W	8.18	
6703.00	32.650	248.440	6616.10	-319.63	-636.63	367.03	40°15'58.041"N	104°37'14.619"W	12.45	
6798.00	37.320	264.240	6694.07	-266.25	-648.97	314.41	40°15'57.924"N	104°37'15.299"W	10.69	
6892.00	46.590	267.730	6763.91	-203.50	-653.20	251.80	40°15'57.889"N	104°37'16.107"W	10.17	
6986.00	57.400	263.640	6821.72	-129.57	-658.95	178.09	40°15'57.839"N	104°37'17.059"W	12.00	
7081.00	68.210	260.970	6865.08	-45.37	-670.34	94.50	40°15'57.735"N	104°37'18.139"W	11.65	
7175.00	72.000	261.270	6897.06	42.71	-683.98	7.18	40°15'57.609"N	104°37'19.267"W	4.04	
7269.00	80.940	265.190	6919.03	133.90	-694.69	-83.46	40°15'57.512"N	104°37'20.437"W	10.34	
7364.00	88.920	268.440	6927.43	228.42	-699.92	-177.86	40°15'57.469"N	104°37'21.656"W	9.06	
7458.00	89.880	270.500	6928.41	322.22	-700.79	-271.84	40°15'57.470"N	104°37'22.868"W	2.42	
7552.00	89.850	271.690	6928.63	415.82	-698.99	-365.82	40°15'57.497"N	104°37'24.080"W	1.27	
7647.00	89.570	272.180	6929.11	510.28	-695.79	-460.77	40°15'57.538"N	104°37'25.304"W	0.59	
7741.00	89.510	272.180	6929.87	603.69	-692.21	-554.70	40°15'57.582"N	104°37'26.516"W	0.06	
7836.00	89.570	272.180	6930.63	698.11	-688.60	-649.63	40°15'57.627"N	104°37'27.740"W	0.06	
7930.00	89.480	271.940	6931.41	791.55	-685.22	-743.56	40°15'57.670"N	104°37'28.951"W	0.27	
8025.00	89.540	273.610	6932.22	885.84	-680.62	-838.44	40°15'57.724"N	104°37'30.174"W	1.76	
8119.00	89.350	274.130	6933.13	978.91	-674.28	-932.22	40°15'57.796"N	104°37'31.383"W	0.59	
8214.00	89.570	272.650	6934.03	1073.07	-668.66	-1027.05	40°15'57.861"N	104°37'32.606"W	1.57	
8309.00	89.570	272.010	6934.74	1167.46	-664.80	-1121.97	40°15'57.908"N	104°37'33.829"W	0.67	
8403.00	89.540	271.870	6935.47	1260.92	-661.61	-1215.91	40°15'57.949"N	104°37'35.041"W	0.15	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)
Area	COLORADO	Well	CENTENNIAL STATE G34-635
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	CENTENNIAL STATE G34-635 AWB
Facility	SEC.35-T04N-R65W		

WELLPATH DATA (180 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8498.00	89.630	271.130	6936.16	1355.45	-659.13	-1310.88	40°15'57.983"N	104°37'36.265"W	0.78	
8592.00	89.450	270.610	6936.91	1449.08	-657.70	-1404.86	40°15'58.006"N	104°37'37.478"W	0.59	
8687.00	89.510	268.350	6937.78	1543.88	-658.56	-1499.85	40°15'58.007"N	104°37'38.703"W	2.38	
8781.00	89.910	269.240	6938.25	1637.75	-660.54	-1593.83	40°15'57.996"N	104°37'39.915"W	1.04	
8876.00	89.780	269.740	6938.51	1732.55	-661.38	-1688.82	40°15'57.997"N	104°37'41.141"W	0.54	
8970.00	89.720	270.240	6938.92	1826.30	-661.40	-1782.82	40°15'58.006"N	104°37'42.353"W	0.54	
9065.00	89.660	270.650	6939.43	1920.99	-660.66	-1877.82	40°15'58.023"N	104°37'43.579"W	0.44	
9159.00	89.940	271.940	6939.76	2014.56	-658.54	-1971.79	40°15'58.053"N	104°37'44.791"W	1.40	
9254.00	89.820	271.970	6939.96	2109.01	-655.30	-2066.73	40°15'58.094"N	104°37'46.015"W	0.13	
9348.00	89.850	272.120	6940.23	2202.46	-651.94	-2160.67	40°15'58.136"N	104°37'47.226"W	0.16	
9443.00	89.780	271.020	6940.54	2296.98	-649.34	-2255.64	40°15'58.171"N	104°37'48.451"W	1.16	
9537.00	89.880	270.910	6940.82	2390.60	-647.76	-2349.62	40°15'58.196"N	104°37'49.663"W	0.16	
9632.00	89.750	268.060	6941.12	2485.39	-648.61	-2444.61	40°15'58.197"N	104°37'50.888"W	3.00	
9727.00	89.780	267.100	6941.51	2580.35	-652.62	-2539.52	40°15'58.166"N	104°37'52.113"W	1.01	
9821.00	89.910	268.360	6941.77	2674.29	-656.35	-2633.44	40°15'58.139"N	104°37'53.325"W	1.35	
9915.00	89.850	269.720	6941.96	2768.14	-657.92	-2727.43	40°15'58.132"N	104°37'54.538"W	1.45	
10010.00	89.850	269.730	6942.21	2862.92	-658.38	-2822.43	40°15'58.137"N	104°37'55.763"W	0.01	
10104.00	89.820	268.610	6942.48	2956.76	-659.74	-2916.42	40°15'58.133"N	104°37'56.976"W	1.19	
10199.00	89.820	268.140	6942.78	3051.66	-662.43	-3011.38	40°15'58.115"N	104°37'58.201"W	0.49	
10293.00	89.880	267.480	6943.03	3145.61	-666.02	-3105.31	40°15'58.089"N	104°37'59.413"W	0.71	
10387.00	89.880	266.920	6943.22	3239.58	-670.62	-3199.19	40°15'58.052"N	104°38'00.625"W	0.60	
10482.00	89.910	266.510	6943.40	3334.57	-676.06	-3294.04	40°15'58.008"N	104°38'01.849"W	0.43	
10576.00	89.750	265.170	6943.68	3428.56	-682.88	-3387.79	40°15'57.949"N	104°38'03.059"W	1.44	
10671.00	89.850	265.970	6944.01	3523.56	-690.22	-3482.50	40°15'57.886"N	104°38'04.282"W	0.85	
10765.00	89.850	265.970	6944.26	3617.56	-696.82	-3576.27	40°15'57.830"N	104°38'05.492"W	0.00	
10860.00	89.750	266.470	6944.59	3712.56	-703.09	-3671.06	40°15'57.777"N	104°38'06.716"W	0.54	
10954.00	89.750	266.320	6945.00	3806.55	-709.00	-3764.88	40°15'57.728"N	104°38'07.926"W	0.16	
11049.00	89.420	265.760	6945.69	3901.55	-715.56	-3859.65	40°15'57.672"N	104°38'09.150"W	0.68	
11143.00	89.480	266.570	6946.59	3995.54	-721.84	-3953.43	40°15'57.619"N	104°38'10.360"W	0.86	
11238.00	89.510	266.220	6947.42	4090.53	-727.82	-4048.24	40°15'57.569"N	104°38'11.584"W	0.37	





Actual Wellpath Report  
CENTENNIAL STATE G34-635 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)
Area	COLORADO	Well	CENTENNIAL STATE G34-635
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	CENTENNIAL STATE G34-635 AWB
Facility	SEC.35-T04N-R65W		

WELLPATH DATA (180 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11332.00	89.510	267.190	6948.23	4184.52	-733.22	-4142.08	40°15'57.525"N	104°38'12.795"W	1.03	
11427.00	89.690	267.790	6948.89	4279.47	-737.38	-4236.98	40°15'57.493"N	104°38'14.020"W	0.66	
11521.00	89.570	269.170	6949.50	4373.37	-739.87	-4330.95	40°15'57.477"N	104°38'15.232"W	1.47	
11616.00	89.780	270.000	6950.04	4468.16	-740.56	-4425.94	40°15'57.479"N	104°38'16.458"W	0.90	
11710.00	89.600	271.570	6950.55	4561.80	-739.27	-4519.93	40°15'57.501"N	104°38'17.670"W	1.68	
11805.00	89.570	272.440	6951.23	4656.25	-735.95	-4614.87	40°15'57.543"N	104°38'18.894"W	0.92	
11900.00	89.570	272.920	6951.95	4750.56	-731.51	-4709.76	40°15'57.596"N	104°38'20.118"W	0.51	
11994.00	89.570	273.480	6952.65	4843.78	-726.26	-4803.61	40°15'57.657"N	104°38'21.328"W	0.60	
12089.00	89.540	274.510	6953.39	4937.81	-719.64	-4898.38	40°15'57.731"N	104°38'22.549"W	1.08	
12183.00	89.540	275.070	6954.15	5030.66	-711.79	-4992.04	40°15'57.818"N	104°38'23.756"W	0.60	
12277.00	89.570	274.110	6954.88	5123.55	-704.27	-5085.74	40°15'57.901"N	104°38'24.964"W	1.02	
12372.00	89.600	272.280	6955.56	5217.76	-698.98	-5180.58	40°15'57.963"N	104°38'26.187"W	1.93	
12466.00	89.540	272.850	6956.27	5311.11	-694.77	-5274.49	40°15'58.013"N	104°38'27.398"W	0.61	
12561.00	89.570	271.100	6957.01	5405.55	-691.50	-5369.42	40°15'58.055"N	104°38'28.622"W	1.84	
12655.00	89.540	270.310	6957.74	5499.21	-690.34	-5463.41	40°15'58.075"N	104°38'29.834"W	0.84	
12750.00	89.570	269.920	6958.47	5593.94	-690.15	-5558.41	40°15'58.086"N	104°38'31.059"W	0.41	
12844.00	89.540	269.370	6959.20	5687.72	-690.73	-5652.41	40°15'58.089"N	104°38'32.272"W	0.59	
12939.00	89.630	268.540	6959.89	5782.58	-692.46	-5747.39	40°15'58.081"N	104°38'33.497"W	0.88	
13033.00	89.910	267.500	6960.27	5876.51	-695.71	-5841.33	40°15'58.058"N	104°38'34.709"W	1.15	
13128.00	89.780	267.140	6960.53	5971.47	-700.15	-5936.22	40°15'58.023"N	104°38'35.934"W	0.40	
13223.00	89.820	269.070	6960.86	6066.39	-703.29	-6031.17	40°15'58.001"N	104°38'37.159"W	2.03	
13317.00	89.820	271.450	6961.15	6160.10	-702.87	-6125.16	40°15'58.014"N	104°38'38.372"W	2.53	
13412.00	89.780	271.370	6961.49	6254.65	-700.53	-6220.13	40°15'58.047"N	104°38'39.596"W	0.09	
13506.00	89.660	271.430	6961.95	6348.20	-698.23	-6314.10	40°15'58.078"N	104°38'40.808"W	0.14	
13601.00	89.850	271.510	6962.35	6442.74	-695.80	-6409.07	40°15'58.111"N	104°38'42.033"W	0.22	
13695.00	89.820	271.600	6962.62	6536.27	-693.25	-6503.03	40°15'58.146"N	104°38'43.245"W	0.10	
13789.00	89.880	270.620	6962.87	6629.87	-691.43	-6597.01	40°15'58.173"N	104°38'44.457"W	1.04	
13884.00	89.850	270.540	6963.09	6724.54	-690.46	-6692.01	40°15'58.191"N	104°38'45.682"W	0.09	
13979.00	89.780	269.860	6963.40	6819.26	-690.13	-6787.01	40°15'58.203"N	104°38'46.907"W	0.72	
14073.00	89.750	268.670	6963.78	6913.09	-691.34	-6881.00	40°15'58.200"N	104°38'48.120"W	1.27	



# Actual Wellpath Report

CENTENNIAL STATE G34-635 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)
Area	COLORADO	Well	CENTENNIAL STATE G34-635
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	CENTENNIAL STATE G34-635 AWB
Facility	SEC.35-T04N-R65W		

WELLPATH DATA (180 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14168.00	89.600	268.320	6964.32	7007.98	-693.83	-6975.96	40°15'58.185"N	104°38'49.345"W	0.40	
14263.00	89.820	267.400	6964.80	7102.92	-697.38	-7070.89	40°15'58.159"N	104°38'50.570"W	1.00	
14357.00	89.690	266.030	6965.21	7196.91	-702.77	-7164.74	40°15'58.114"N	104°38'51.781"W	1.46	
14451.00	89.780	266.020	6965.64	7290.91	-709.28	-7258.51	40°15'58.059"N	104°38'52.992"W	0.10	
14546.00	89.630	266.370	6966.13	7385.90	-715.59	-7353.30	40°15'58.006"N	104°38'54.215"W	0.40	
14640.00	89.750	267.420	6966.64	7479.88	-720.68	-7447.16	40°15'57.964"N	104°38'55.427"W	1.12	
14735.00	89.720	268.620	6967.08	7574.81	-723.96	-7542.10	40°15'57.941"N	104°38'56.652"W	1.26	
14924.00	89.660	269.250	6968.10	7763.53	-727.47	-7731.06	40°15'57.924"N	104°38'59.090"W	0.33	
15018.00	89.690	269.670	6968.63	7857.34	-728.36	-7825.06	40°15'57.924"N	104°39'00.302"W	0.45	
15113.00	89.750	270.190	6969.10	7952.09	-728.48	-7920.05	40°15'57.932"N	104°39'01.528"W	0.55	
15302.00	89.630	269.280	6970.12	8140.64	-729.35	-8109.05	40°15'57.941"N	104°39'03.966"W	0.49	
15396.00	89.780	270.370	6970.60	8234.41	-729.64	-8203.04	40°15'57.947"N	104°39'05.178"W	1.17	
15491.00	89.690	271.740	6971.04	8329.01	-727.89	-8298.02	40°15'57.974"N	104°39'06.403"W	1.45	
15586.00	89.750	273.270	6971.51	8423.36	-723.74	-8392.93	40°15'58.024"N	104°39'07.627"W	1.61	
15680.00	90.340	274.270	6971.43	8516.46	-717.55	-8486.72	40°15'58.094"N	104°39'08.836"W	1.24	
15775.00	89.690	277.120	6971.41	8610.04	-708.13	-8581.25	40°15'58.196"N	104°39'10.054"W	3.08	
15869.00	89.720	276.880	6971.89	8702.25	-696.67	-8674.54	40°15'58.318"N	104°39'11.256"W	0.26	
15964.00	90.400	275.680	6971.79	8795.67	-686.28	-8768.97	40°15'58.429"N	104°39'12.473"W	1.45	
16058.00	90.060	273.870	6971.42	8888.52	-678.46	-8862.64	40°15'58.515"N	104°39'13.680"W	1.96	
16153.00	89.720	271.020	6971.60	8982.87	-674.40	-8957.54	40°15'58.564"N	104°39'14.904"W	3.02	
16247.00	89.570	267.450	6972.18	9076.69	-675.66	-9051.52	40°15'58.561"N	104°39'16.116"W	3.80	
16342.00	89.450	267.060	6972.99	9171.66	-680.21	-9146.41	40°15'58.525"N	104°39'17.341"W	0.43	
16436.00	89.570	265.150	6973.80	9265.65	-686.59	-9240.18	40°15'58.470"N	104°39'18.551"W	2.04	
16531.00	89.570	267.610	6974.51	9360.63	-692.59	-9334.98	40°15'58.420"N	104°39'19.775"W	2.59	
16625.00	89.600	265.010	6975.19	9454.62	-698.64	-9428.78	40°15'58.369"N	104°39'20.985"W	2.77	
16720.00	89.660	265.230	6975.81	9549.61	-706.72	-9523.43	40°15'58.298"N	104°39'22.207"W	0.24	
16814.00	89.450	265.650	6976.54	9643.61	-714.19	-9617.13	40°15'58.233"N	104°39'23.417"W	0.50	
16909.00	89.480	265.830	6977.42	9738.60	-721.25	-9711.86	40°15'58.172"N	104°39'24.640"W	0.19	
16996.00	89.690	265.690	6978.05	9825.60	-727.68	-9798.62	40°15'58.117"N	104°39'25.760"W	0.29	Last BHI MWD Survey
17020.00	89.690	265.690	6978.18	9849.60	-729.49	-9822.55	40°15'58.101"N	104°39'26.068"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: CENTENNIAL STATE G34-635 AWB      Ref Wellpath: CENTENNIAL STATE G34-635 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	1939.00	1909.00	30.00	1938.94	-0.02	-0.03	0.65	-2.28
9.625in Casing Surface	30.00	1939.00	1909.00	30.00	1938.94	-0.02	-0.03	0.65	-2.28
8.5in Open Hole	1939.00	17020.00	15081.00	1938.94	6978.18	0.65	-2.28	-729.49	-9822.55

TARGETS									
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	
SECTION 34-T4N-R65W	11.00	21.86	-0.22	3244998.85	1341664.89	40°16'04.584"N	104°37'19.272"W	polygon	
SECTION 35-T4N-R65W	11.00	21.86	-0.22	3244998.85	1341664.89	40°16'04.584"N	104°37'19.272"W	polygon	
CENTENNIAL STATE G34-635 Landing Point	6930.00	-675.00	-170.00	3244829.07	1340968.06	40°15'57.715"N	104°37'21.551"W	point	
	6980.55	-718.32	-9825.10	3235174.40	1340924.74	40°15'58.212"N	104°39'26.100"W	point	



TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CENTENNIAL STATE G34-635 REV-1 BHL from Plat (1660'FSL&460'FWL,SEC.34)								
SECTION 34-T4N-R65W Hardline (460'Setback)	7101.00	21.86	-0.22	3244998.85	1341664.89	40°16'04.584"N	104°37'19.272"W	polygon
SECTION 35-T4N-R65W Hardline (460'Setback)	7101.00	21.86	-0.22	3244998.85	1341664.89	40°16'04.584"N	104°37'19.272"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: CENTENNIAL STATE G34-635 AWB    Ref Wellpath: CENTENNIAL STATE G34-635 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1932.00	Gyrodata standard - Drop gyro or Multi-shot	3rd Party Surface Gyros <82'-1932'>	CENTENNIAL STATE G34-635 AWB
1932.00	16996.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	BHI/ATC 8.5 MWD OWSG MWD+IFR+MSA <1978'-16996'>	CENTENNIAL STATE G34-635 AWB
16996.00	17020.00	Blind Drilling (std)	Projection to bit	CENTENNIAL STATE G34-635 AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 CENTENNIAL STATE G34-635(2320'FSL&280'FEL,SEC.35)
Area	COLORADO	Well	CENTENNIAL STATE G34-635
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	CENTENNIAL STATE G34-635 AWB
Facility	SEC.35-T04N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1932.00	1.650	338.390	1931.94	Tie to Surface Gyros
16996.00	89.690	265.690	6978.05	Last BHI MWD Survey
17020.00	89.690	265.690	6978.18	Projection to Bit

COMMENTS
<div>Wellpath general comments</div> <div>SURFACE LOCATION: NESE</div> <div>40.26788N</div> <div>104.62202W</div> <div>API: 05-123-44606</div>