

NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GUTTERSEN D25-772
Facility: SEC.25-T03N-R64W Wellbore: GUTTERSEN D25-772 PWB

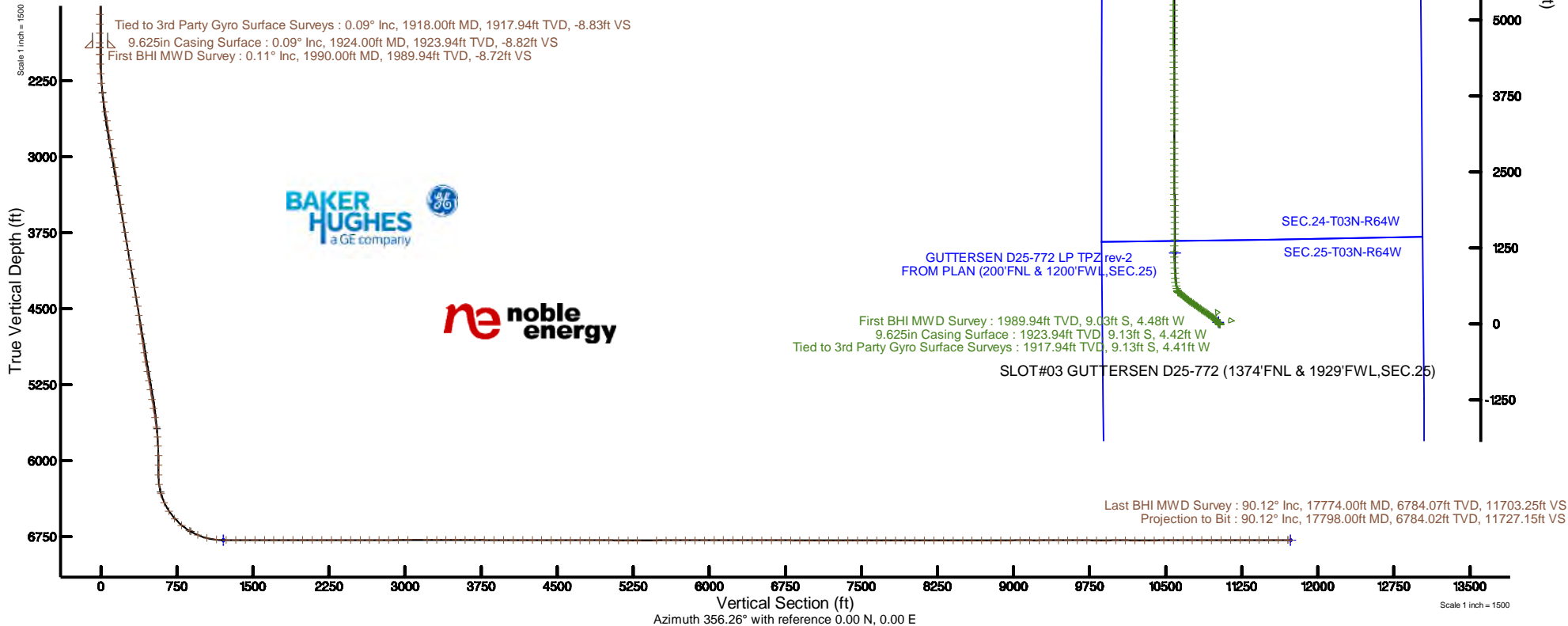
Plot reference wellpath is GUTTERSEN D25-772 (REV-8.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (30KB) (RKB)	North Reference: Grid north
Measured depths are referenced to RIG (30KB) (RKB)	Scale: True distance
RIG (30KB) (RKB) to Mean Sea Level: 4816 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)): 0 feet	Created by: doddanna on 2019-10-01
Coordinates are in feet referenced to Slot	Database: WellArchitectDB2

Location Information

Facility Name			Grid East (US R)	Grid North (US R)	Latitude	Longitude
SEC.25-T03N-R64W			3276988.115	1318508.078	40°12'12.420"N	104°30'29.952"W
Slot	Local N (R)	Local E (R)	Grid East (US R)	Grid North (US R)	Latitude	Longitude
SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)	-1296.14	1699.05	3278687.092	1317211.991	40°11'59.424"N	104°30'08.244"W
RIG (30KB) (RKB) to Ground level (At Slot: SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25))					4816ft	
Mean Sea Level to Ground level (At Slot: SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25))					0ft	
RIG (30KB) (RKB) to Mean Sea Level					4816ft	

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
30.00	17799.62	OWSG MWD rev2	OWSG MWD rev2 + IFR1 + Multi-Station Correction		GUTTERSEN D25-772 PWB





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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Area	COLORADO	Well	GUTTERSEN D25-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Doddanna
Scale	0.999957	Report Generated	10/1/2019 at 2:17:48 PM
Convergence at slot	0.64° East	Database/Source file	WellArchitectDB2/GUTTERSEN_D25-772_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1296.14	1699.05	3278687.09	1317211.99	40°11'59.424"N	104°30'08.244"W
Facility Reference Pt			3276988.12	1318508.08	40°12'12.420"N	104°30'29.952"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	4816.00ft
Horizontal Reference Pt	Slot	RIG (30'KB) (RKB) to Mean Sea Level	4816.00ft
Vertical Reference Pt	RIG (30'KB) (RKB)	RIG (30'KB) (RKB) to Ground Level at Slot (SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25))	4816.00ft
MD Reference Pt	RIG (30'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	356.26°



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

WELLPATH DATA (189 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	164.650	0.00	0.00	0.00	0.00	40°11'59.424"N	104°30'08.244"W	0.00	
82.00	0.360	164.650	82.00	-0.25	-0.25	0.07	40°11'59.422"N	104°30'08.243"W	0.44	
176.00	0.380	230.970	176.00	-0.72	-0.73	-0.10	40°11'59.417"N	104°30'08.245"W	0.43	
268.00	0.740	209.830	267.99	-1.39	-1.44	-0.63	40°11'59.410"N	104°30'08.252"W	0.44	
363.00	0.230	310.740	362.99	-1.77	-1.84	-1.08	40°11'59.406"N	104°30'08.258"W	0.86	
457.00	0.860	230.040	456.99	-2.06	-2.17	-1.76	40°11'59.403"N	104°30'08.267"W	0.91	
552.00	0.520	201.140	551.98	-2.87	-3.03	-2.46	40°11'59.394"N	104°30'08.276"W	0.50	
646.00	0.500	199.880	645.98	-3.63	-3.82	-2.76	40°11'59.387"N	104°30'08.280"W	0.02	
741.00	0.460	219.980	740.97	-4.29	-4.50	-3.14	40°11'59.380"N	104°30'08.285"W	0.18	
836.00	0.290	228.690	835.97	-4.71	-4.95	-3.57	40°11'59.375"N	104°30'08.291"W	0.19	
930.00	0.880	224.900	929.97	-5.33	-5.62	-4.26	40°11'59.369"N	104°30'08.300"W	0.63	
1024.00	0.530	206.980	1023.96	-6.18	-6.52	-4.96	40°11'59.360"N	104°30'08.309"W	0.44	
1119.00	0.520	198.650	1118.95	-6.96	-7.32	-5.30	40°11'59.352"N	104°30'08.313"W	0.08	
1214.00	0.580	198.810	1213.95	-7.80	-8.18	-5.59	40°11'59.344"N	104°30'08.317"W	0.06	
1308.00	0.380	195.040	1307.95	-8.53	-8.93	-5.83	40°11'59.336"N	104°30'08.320"W	0.22	
1403.00	0.330	154.940	1402.95	-9.09	-9.49	-5.79	40°11'59.331"N	104°30'08.320"W	0.26	
1497.00	0.150	193.550	1496.94	-9.46	-9.85	-5.71	40°11'59.327"N	104°30'08.319"W	0.25	
1592.00	0.210	131.550	1591.94	-9.70	-10.09	-5.61	40°11'59.325"N	104°30'08.318"W	0.20	
1686.00	0.280	55.360	1685.94	-9.70	-10.07	-5.29	40°11'59.325"N	104°30'08.314"W	0.33	
1781.00	0.430	46.920	1780.94	-9.36	-9.69	-4.84	40°11'59.329"N	104°30'08.308"W	0.17	
1875.00	0.300	33.320	1874.94	-8.94	-9.25	-4.44	40°11'59.333"N	104°30'08.303"W	0.17	
1918.00	0.090	310.800	1917.94	-8.83	-9.13	-4.41	40°11'59.334"N	104°30'08.302"W	0.70	Tied to 3rd Party Gyro Surface Surveys
1990.00	0.110	339.230	1989.94	-8.72	-9.03	-4.48	40°11'59.335"N	104°30'08.303"W	0.07	First BHI MWD Survey
2084.00	2.850	321.080	2083.90	-6.72	-7.13	-5.98	40°11'59.354"N	104°30'08.322"W	2.92	
2179.00	5.400	314.670	2178.65	-1.45	-2.15	-10.64	40°11'59.404"N	104°30'08.381"W	2.72	
2273.00	7.610	317.810	2272.03	6.73	5.58	-17.97	40°11'59.481"N	104°30'08.475"W	2.38	
2368.00	9.790	318.460	2365.94	18.04	16.28	-27.55	40°11'59.588"N	104°30'08.597"W	2.30	
2462.00	10.790	318.210	2458.42	31.29	28.83	-38.71	40°11'59.713"N	104°30'08.739"W	1.06	
2557.00	11.010	319.120	2551.71	45.52	42.31	-50.57	40°11'59.848"N	104°30'08.890"W	0.29	
2651.00	11.700	318.690	2643.87	60.23	56.26	-62.74	40°11'59.987"N	104°30'09.044"W	0.74	



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Operator	NOBLE ENERGY, INC	Slot	SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Area	COLORADO	Well	GUTTERSEN D25-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

WELLPATH DATA (189 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2746.00	12.240	306.430	2736.82	74.36	69.48	-77.20	40°12'00.119"N	104°30'09.229"W	2.73	
2840.00	13.690	307.520	2828.42	88.12	82.17	-94.05	40°12'00.246"N	104°30'09.444"W	1.56	
2935.00	14.970	307.780	2920.46	103.67	96.53	-112.66	40°12'00.390"N	104°30'09.682"W	1.35	
3029.00	14.620	308.710	3011.34	119.72	111.39	-131.51	40°12'00.539"N	104°30'09.923"W	0.45	
3123.00	14.860	308.640	3102.25	135.85	126.34	-150.18	40°12'00.689"N	104°30'10.161"W	0.26	
3218.00	14.380	303.510	3194.18	151.20	140.46	-169.54	40°12'00.831"N	104°30'10.408"W	1.45	
3312.00	13.870	306.500	3285.34	165.55	153.60	-188.33	40°12'00.963"N	104°30'10.649"W	0.95	
3407.00	13.870	304.620	3377.57	179.97	166.85	-206.85	40°12'01.096"N	104°30'10.885"W	0.47	
3501.00	14.560	305.540	3468.69	194.44	180.11	-225.74	40°12'01.229"N	104°30'11.127"W	0.77	
3596.00	14.570	304.100	3560.64	209.33	193.76	-245.35	40°12'01.366"N	104°30'11.378"W	0.38	
3690.00	14.730	304.570	3651.58	223.99	207.16	-264.98	40°12'01.501"N	104°30'11.629"W	0.21	
3785.00	14.780	304.260	3743.45	238.93	220.84	-284.94	40°12'01.638"N	104°30'11.884"W	0.10	
3879.00	14.900	304.150	3834.31	253.74	234.37	-304.85	40°12'01.774"N	104°30'12.139"W	0.13	
3974.00	14.860	304.540	3926.13	268.78	248.14	-324.99	40°12'01.912"N	104°30'12.396"W	0.11	
4068.00	14.780	307.900	4017.00	284.21	262.34	-344.38	40°12'02.055"N	104°30'12.644"W	0.92	
4163.00	14.820	307.250	4108.85	300.23	277.13	-363.62	40°12'02.203"N	104°30'12.890"W	0.18	
4258.00	14.840	307.660	4200.69	316.25	291.92	-382.92	40°12'02.351"N	104°30'13.136"W	0.11	
4352.00	14.780	305.470	4291.56	331.79	306.23	-402.21	40°12'02.495"N	104°30'13.383"W	0.60	
4447.00	14.820	306.000	4383.41	347.21	320.41	-421.91	40°12'02.637"N	104°30'13.635"W	0.15	
4542.00	15.020	303.510	4475.21	362.43	334.34	-442.00	40°12'02.777"N	104°30'13.891"W	0.71	
4636.00	13.510	297.430	4566.31	375.49	346.13	-461.91	40°12'02.896"N	104°30'14.146"W	2.26	
4731.00	11.070	304.950	4659.14	386.93	356.47	-479.24	40°12'03.000"N	104°30'14.368"W	3.07	
4825.00	12.960	308.810	4751.07	399.70	368.24	-494.85	40°12'03.118"N	104°30'14.568"W	2.18	
4920.00	14.010	308.090	4843.45	414.57	382.02	-512.20	40°12'03.256"N	104°30'14.789"W	1.12	
5014.00	12.090	308.710	4935.02	428.81	395.19	-528.84	40°12'03.388"N	104°30'15.002"W	2.05	
5108.00	14.430	308.440	5026.51	443.31	408.63	-545.70	40°12'03.522"N	104°30'15.217"W	2.49	
5203.00	14.500	308.740	5118.50	459.29	423.43	-564.24	40°12'03.671"N	104°30'15.454"W	0.11	
5297.00	13.840	309.480	5209.64	474.94	437.95	-582.10	40°12'03.816"N	104°30'15.682"W	0.73	
5392.00	13.760	309.390	5301.90	490.44	452.34	-599.60	40°12'03.960"N	104°30'15.905"W	0.09	
5486.00	13.880	309.150	5393.17	505.76	466.55	-616.99	40°12'04.103"N	104°30'16.127"W	0.14	



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Operator	NOBLE ENERGY, INC	Slot	SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Area	COLORADO	Well	GUTTERSEN D25-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

WELLPATH DATA (189 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5581.00	13.300	309.010	5485.51	520.93	480.62	-634.31	40°12'04.244"N	104°30'16.349"W	0.61	
5675.00	11.760	309.090	5577.27	534.78	493.47	-650.15	40°12'04.372"N	104°30'16.551"W	1.64	
5770.00	10.430	309.490	5670.49	547.25	505.05	-664.30	40°12'04.488"N	104°30'16.731"W	1.40	
5864.00	8.050	308.790	5763.27	557.53	514.58	-676.00	40°12'04.584"N	104°30'16.881"W	2.53	
5959.00	5.210	309.910	5857.62	565.00	521.52	-684.50	40°12'04.653"N	104°30'16.989"W	2.99	
6053.00	2.550	309.490	5951.40	569.38	525.59	-689.38	40°12'04.694"N	104°30'17.052"W	2.83	
6147.00	0.460	171.380	6045.37	570.44	526.54	-690.94	40°12'04.704"N	104°30'17.072"W	3.09	
6242.00	0.040	251.840	6140.37	570.05	526.15	-690.92	40°12'04.700"N	104°30'17.071"W	0.48	
6337.00	7.080	350.460	6235.13	575.87	531.93	-691.92	40°12'04.757"N	104°30'17.083"W	7.46	
6431.00	15.420	342.900	6327.25	593.83	549.62	-696.56	40°12'04.932"N	104°30'17.141"W	8.99	
6526.00	25.170	344.870	6416.24	626.00	581.27	-705.57	40°12'05.246"N	104°30'17.252"W	10.29	
6620.00	33.550	345.410	6498.10	671.18	625.78	-717.35	40°12'05.687"N	104°30'17.398"W	8.92	
6715.00	42.080	350.400	6573.09	728.75	682.69	-729.30	40°12'06.251"N	104°30'17.543"W	9.53	
6809.00	50.390	356.220	6638.09	796.44	750.02	-736.96	40°12'06.917"N	104°30'17.632"W	9.90	
6904.00	59.360	358.050	6692.69	874.05	827.55	-740.77	40°12'07.684"N	104°30'17.670"W	9.57	
6998.00	67.750	357.320	6734.52	958.11	911.57	-744.18	40°12'08.514"N	104°30'17.702"W	8.95	
7093.00	75.820	356.610	6764.19	1048.27	1001.60	-748.97	40°12'09.404"N	104°30'17.751"W	8.52	
7187.00	84.790	359.370	6780.00	1140.78	1094.10	-752.19	40°12'10.319"N	104°30'17.779"W	9.97	
7282.00	90.370	1.370	6784.01	1235.41	1188.97	-751.57	40°12'11.256"N	104°30'17.757"W	6.24	
7376.00	89.750	1.730	6783.92	1329.01	1282.94	-749.03	40°12'12.184"N	104°30'17.711"W	0.76	
7471.00	89.970	2.220	6784.15	1423.54	1377.88	-745.75	40°12'13.122"N	104°30'17.655"W	0.57	
7566.00	89.820	0.380	6784.32	1518.16	1472.85	-743.60	40°12'14.060"N	104°30'17.613"W	1.94	
7661.00	89.910	0.730	6784.55	1612.90	1567.84	-742.68	40°12'14.999"N	104°30'17.588"W	0.38	
7755.00	90.000	359.380	6784.62	1706.69	1661.84	-742.59	40°12'15.928"N	104°30'17.573"W	1.44	
7850.00	90.000	359.450	6784.62	1801.55	1756.84	-743.56	40°12'16.866"N	104°30'17.572"W	0.07	
7944.00	90.030	358.940	6784.60	1895.42	1850.83	-744.88	40°12'17.795"N	104°30'17.575"W	0.54	
8039.00	90.090	359.080	6784.50	1990.31	1945.81	-746.52	40°12'18.734"N	104°30'17.583"W	0.16	
8133.00	89.820	358.130	6784.57	2084.23	2039.78	-748.81	40°12'19.663"N	104°30'17.599"W	1.05	
8228.00	90.250	359.100	6784.51	2179.15	2134.76	-751.10	40°12'20.602"N	104°30'17.614"W	1.12	
8322.00	89.970	359.380	6784.33	2273.03	2228.75	-752.35	40°12'21.531"N	104°30'17.617"W	0.42	



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
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WELLPATH DATA (189 stations)

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8417.00	90.250	0.120	6784.15	2367.85	2323.75	-752.77	40°12'22.469"N	104°30'17.608"W	0.83	
8511.00	90.120	359.900	6783.85	2461.65	2417.74	-752.75	40°12'23.398"N	104°30'17.595"W	0.27	
8606.00	89.940	359.080	6783.80	2556.50	2512.74	-753.59	40°12'24.337"N	104°30'17.592"W	0.88	
8700.00	90.000	0.130	6783.85	2650.34	2606.74	-754.24	40°12'25.266"N	104°30'17.587"W	1.12	
8795.00	90.030	0.050	6783.82	2745.12	2701.74	-754.09	40°12'26.205"N	104°30'17.571"W	0.09	
8890.00	90.180	0.470	6783.65	2839.89	2796.73	-753.66	40°12'27.143"N	104°30'17.552"W	0.47	
8984.00	90.890	0.770	6782.77	2933.62	2890.72	-752.65	40°12'28.072"N	104°30'17.525"W	0.82	
9079.00	90.180	0.100	6781.88	3028.36	2985.72	-751.92	40°12'29.010"N	104°30'17.502"W	1.03	
9268.00	89.970	359.830	6781.63	3216.97	3174.72	-752.04	40°12'30.878"N	104°30'17.476"W	0.18	
9362.00	89.910	359.790	6781.73	3310.79	3268.72	-752.35	40°12'31.807"N	104°30'17.466"W	0.08	
9456.00	89.970	0.780	6781.83	3404.55	3362.71	-751.88	40°12'32.736"N	104°30'17.447"W	1.06	
9551.00	89.750	359.920	6782.06	3499.31	3457.71	-751.30	40°12'33.674"N	104°30'17.426"W	0.93	
9645.00	89.820	359.700	6782.42	3593.13	3551.71	-751.62	40°12'34.603"N	104°30'17.416"W	0.25	
9740.00	89.780	359.630	6782.75	3687.96	3646.71	-752.17	40°12'35.542"N	104°30'17.409"W	0.08	
9835.00	89.880	359.880	6783.03	3782.79	3741.71	-752.58	40°12'36.481"N	104°30'17.401"W	0.28	
9929.00	89.750	359.780	6783.33	3876.60	3835.70	-752.86	40°12'37.410"N	104°30'17.391"W	0.17	
10024.00	89.750	359.450	6783.75	3971.44	3930.70	-753.49	40°12'38.348"N	104°30'17.385"W	0.35	
10118.00	89.750	359.130	6784.16	4065.31	4024.69	-754.66	40°12'39.277"N	104°30'17.387"W	0.34	
10212.00	89.720	359.460	6784.59	4159.17	4118.68	-755.82	40°12'40.206"N	104°30'17.388"W	0.35	
10307.00	89.820	0.580	6784.97	4253.97	4213.68	-755.78	40°12'41.145"N	104°30'17.374"W	1.18	
10401.00	89.750	358.800	6785.33	4347.80	4307.68	-756.29	40°12'42.074"N	104°30'17.367"W	1.90	
10496.00	89.660	359.250	6785.82	4442.68	4402.66	-757.91	40°12'43.012"N	104°30'17.374"W	0.48	
10590.00	89.750	359.430	6786.30	4536.55	4496.65	-758.99	40°12'43.941"N	104°30'17.374"W	0.21	
10685.00	89.780	359.520	6786.69	4631.40	4591.65	-759.86	40°12'44.880"N	104°30'17.372"W	0.10	
10780.00	89.780	359.560	6787.05	4726.24	4686.65	-760.62	40°12'45.819"N	104°30'17.368"W	0.04	
10874.00	89.690	359.550	6787.49	4820.09	4780.64	-761.35	40°12'46.748"N	104°30'17.364"W	0.10	
10969.00	89.880	359.730	6787.84	4914.92	4875.64	-761.95	40°12'47.686"N	104°30'17.358"W	0.28	
11063.00	89.970	0.430	6787.97	5008.71	4969.64	-761.82	40°12'48.615"N	104°30'17.342"W	0.75	
11158.00	89.850	359.740	6788.12	5103.50	5064.64	-761.68	40°12'49.554"N	104°30'17.327"W	0.74	
11252.00	89.910	0.920	6788.31	5197.26	5158.63	-761.14	40°12'50.483"N	104°30'17.306"W	1.26	



Actual Wellpath Report

GUTTERSEN D25-772 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Area	COLORADO	Well	GUTTERSEN D25-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

WELLPATH DATA (189 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11346.00	90.030	0.540	6788.36	5290.98	5252.63	-759.94	40°12'51.411"N	104°30'17.277"W	0.42	
11535.00	90.150	0.480	6788.07	5479.46	5441.62	-758.26	40°12'53.279"N	104°30'17.228"W	0.07	
11630.00	90.340	0.460	6787.66	5574.20	5536.61	-757.48	40°12'54.217"N	104°30'17.204"W	0.20	
11724.00	90.120	359.860	6787.28	5667.98	5630.61	-757.22	40°12'55.146"N	104°30'17.187"W	0.68	
11819.00	90.060	359.640	6787.13	5762.81	5725.61	-757.63	40°12'56.085"N	104°30'17.179"W	0.24	
11913.00	90.340	0.460	6786.81	5856.60	5819.61	-757.55	40°12'57.014"N	104°30'17.164"W	0.92	
12008.00	90.280	0.410	6786.29	5951.35	5914.61	-756.83	40°12'57.952"N	104°30'17.141"W	0.08	
12103.00	90.340	0.520	6785.78	6046.09	6009.60	-756.06	40°12'58.891"N	104°30'17.118"W	0.13	
12197.00	89.880	359.380	6785.60	6139.89	6103.60	-756.14	40°12'59.820"N	104°30'17.105"W	1.31	
12292.00	90.060	0.030	6785.65	6234.72	6198.60	-756.63	40°13'00.758"N	104°30'17.098"W	0.71	
12386.00	89.780	359.420	6785.78	6328.55	6292.60	-757.08	40°13'01.687"N	104°30'17.090"W	0.71	
12481.00	89.820	0.070	6786.11	6423.37	6387.59	-757.50	40°13'02.626"N	104°30'17.082"W	0.69	
12575.00	89.570	359.200	6786.61	6517.21	6481.59	-758.10	40°13'03.555"N	104°30'17.076"W	0.96	
12670.00	89.720	0.540	6787.20	6612.02	6576.59	-758.31	40°13'04.494"N	104°30'17.065"W	1.42	
12764.00	89.690	359.540	6787.68	6705.81	6670.58	-758.25	40°13'05.423"N	104°30'17.050"W	1.06	
12859.00	89.910	359.800	6788.01	6800.64	6765.58	-758.80	40°13'06.361"N	104°30'17.044"W	0.36	
12953.00	89.850	0.920	6788.21	6894.40	6859.58	-758.21	40°13'07.290"N	104°30'17.022"W	1.19	
13048.00	89.600	0.360	6788.67	6989.12	6954.57	-757.14	40°13'08.229"N	104°30'16.995"W	0.65	
13142.00	89.690	0.520	6789.25	7082.87	7048.56	-756.42	40°13'09.157"N	104°30'16.972"W	0.20	
13237.00	89.780	0.120	6789.69	7177.63	7143.56	-755.89	40°13'10.096"N	104°30'16.952"W	0.43	
13331.00	90.030	359.560	6789.84	7271.45	7237.56	-756.15	40°13'11.025"N	104°30'16.941"W	0.65	
13426.00	89.820	0.080	6789.97	7366.26	7332.56	-756.45	40°13'11.964"N	104°30'16.931"W	0.59	
13521.00	90.090	0.850	6790.04	7461.01	7427.56	-755.68	40°13'12.902"N	104°30'16.908"W	0.86	
13615.00	90.120	1.480	6789.87	7554.66	7521.54	-753.77	40°13'13.831"N	104°30'16.869"W	0.67	
13710.00	90.220	0.750	6789.59	7649.32	7616.52	-751.92	40°13'14.769"N	104°30'16.832"W	0.78	
13804.00	89.910	0.480	6789.48	7743.05	7710.51	-750.91	40°13'15.698"N	104°30'16.805"W	0.44	
13899.00	90.000	359.220	6789.56	7837.86	7805.51	-751.16	40°13'16.636"N	104°30'16.795"W	1.33	
13994.00	90.000	359.560	6789.56	7932.72	7900.50	-752.17	40°13'17.575"N	104°30'16.794"W	0.36	
14088.00	90.090	1.200	6789.48	8026.48	7994.50	-751.55	40°13'18.504"N	104°30'16.772"W	1.75	
14183.00	90.280	0.670	6789.18	8121.16	8089.48	-750.00	40°13'19.442"N	104°30'16.739"W	0.59	



Actual Wellpath Report

GUTTERSEN D25-772 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Area	COLORADO	Well	GUTTERSEN D25-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

WELLPATH DATA (189 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14277.00	90.120	0.010	6788.85	8214.92	8183.48	-749.44	40°13'20.371"N	104°30'16.718"W	0.72	
14372.00	90.120	0.390	6788.65	8309.70	8278.48	-749.11	40°13'21.310"N	104°30'16.700"W	0.40	
14466.00	89.940	0.390	6788.60	8403.45	8372.48	-748.47	40°13'22.238"N	104°30'16.678"W	0.19	
14561.00	90.030	1.000	6788.63	8498.17	8467.47	-747.32	40°13'23.177"N	104°30'16.649"W	0.65	
14655.00	90.060	0.910	6788.55	8591.85	8561.46	-745.75	40°13'24.105"N	104°30'16.616"W	0.10	
14750.00	90.090	1.330	6788.43	8686.51	8656.44	-743.89	40°13'25.044"N	104°30'16.578"W	0.44	
14844.00	90.120	1.090	6788.26	8780.16	8750.42	-741.91	40°13'25.972"N	104°30'16.539"W	0.26	
14939.00	90.000	359.770	6788.16	8874.91	8845.41	-741.20	40°13'26.911"N	104°30'16.516"W	1.40	
15033.00	90.090	359.190	6788.08	8968.76	8939.41	-742.05	40°13'27.840"N	104°30'16.513"W	0.62	
15128.00	90.120	359.190	6787.91	9063.64	9034.40	-743.39	40°13'28.779"N	104°30'16.517"W	0.03	
15222.00	89.820	359.900	6787.96	9157.48	9128.40	-744.14	40°13'29.707"N	104°30'16.513"W	0.82	
15317.00	90.120	359.210	6788.01	9252.33	9223.39	-744.88	40°13'30.646"N	104°30'16.509"W	0.79	
15411.00	90.180	359.500	6787.76	9346.19	9317.39	-745.94	40°13'31.575"N	104°30'16.509"W	0.32	
15506.00	90.120	359.110	6787.51	9441.05	9412.38	-747.09	40°13'32.514"N	104°30'16.510"W	0.42	
15600.00	89.940	359.190	6787.46	9534.94	9506.37	-748.48	40°13'33.443"N	104°30'16.514"W	0.21	
15695.00	90.000	359.810	6787.51	9629.78	9601.36	-749.31	40°13'34.382"N	104°30'16.511"W	0.66	
15789.00	89.630	358.370	6787.82	9723.67	9695.35	-750.80	40°13'35.310"N	104°30'16.517"W	1.58	
15884.00	89.690	357.780	6788.38	9818.62	9790.29	-754.00	40°13'36.249"N	104°30'16.544"W	0.62	
15978.00	90.340	2.120	6788.36	9912.40	9884.27	-754.08	40°13'37.178"N	104°30'16.532"W	4.67	
16073.00	90.520	358.450	6787.64	10007.15	9979.25	-753.60	40°13'38.116"N	104°30'16.512"W	3.87	
16168.00	89.380	358.790	6787.72	10102.06	10074.22	-755.89	40°13'39.055"N	104°30'16.527"W	1.25	
16262.00	89.820	359.330	6788.38	10195.95	10168.21	-757.43	40°13'39.984"N	104°30'16.534"W	0.74	
16357.00	89.510	357.340	6788.94	10290.88	10263.16	-760.19	40°13'40.922"N	104°30'16.556"W	2.12	
16451.00	90.950	358.090	6788.56	10384.85	10357.08	-763.94	40°13'41.851"N	104°30'16.590"W	1.73	
16546.00	91.020	357.560	6786.93	10479.80	10452.00	-767.55	40°13'42.789"N	104°30'16.623"W	0.56	
16641.00	90.120	355.970	6785.98	10574.79	10546.84	-772.91	40°13'43.727"N	104°30'16.678"W	1.92	
16736.00	90.060	356.130	6785.83	10669.78	10641.61	-779.45	40°13'44.664"N	104°30'16.749"W	0.18	
16830.00	90.060	358.280	6785.73	10763.77	10735.49	-784.04	40°13'45.592"N	104°30'16.795"W	2.29	
16924.00	90.090	0.850	6785.61	10857.60	10829.48	-784.75	40°13'46.521"N	104°30'16.790"W	2.73	
17019.00	90.250	3.220	6785.33	10952.11	10924.42	-781.38	40°13'47.459"N	104°30'16.733"W	2.50	



Actual Wellpath Report

GUTTERSEN D25-772 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Area	COLORADO	Well	GUTTERSEN D25-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

WELLPATH DATA (189 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
17114.00	90.490	2.740	6784.71	11046.46	11019.29	-776.44	40°13'48.395"N	104°30'16.656"W	0.56	
17208.00	89.880	2.830	6784.41	11139.85	11113.17	-771.87	40°13'49.323"N	104°30'16.583"W	0.66	
17303.00	90.180	1.880	6784.36	11234.31	11208.09	-767.97	40°13'50.260"N	104°30'16.519"W	1.05	
17397.00	90.150	1.510	6784.09	11327.89	11302.05	-765.19	40°13'51.188"N	104°30'16.470"W	0.39	
17492.00	89.940	1.190	6784.02	11422.52	11397.02	-762.95	40°13'52.126"N	104°30'16.427"W	0.40	
17586.00	89.940	2.630	6784.11	11516.06	11490.97	-759.81	40°13'53.054"N	104°30'16.373"W	1.53	
17681.00	90.000	1.040	6784.16	11610.61	11585.92	-756.77	40°13'53.992"N	104°30'16.320"W	1.67	
17774.00	90.120	1.510	6784.07	11703.25	11678.89	-754.70	40°13'54.911"N	104°30'16.280"W	0.52	Last BHI MWD Survey
17798.00	90.120	1.510	6784.02	11727.15	11702.89	-754.07	40°13'55.148"N	104°30'16.268"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: GUTTERSEN D25-772 AWB Ref Wellpath: GUTTERSEN D25-772 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	1924.00	1894.00	30.00	1923.94	-0.03	0.01	-9.13	-4.42



Actual Wellpath Report

GUTTERSEN D25-772 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Area	COLORADO	Well	GUTTERSEN D25-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
GUTTERSEN D25-781 SEC.13-T03N-R64W	-1.00	25.22	-25.43	3278661.67	1317237.21	40°11'59.676"N	104°30'08.568"W	polygon
GUTTERSEN D25-781 SEC.24-T03N-R64W	-1.00	25.22	-25.43	3278661.67	1317237.21	40°11'59.676"N	104°30'08.568"W	polygon
GUTTERSEN D25-781 SEC.25-T03N-R64W	-1.00	25.22	-25.43	3278661.67	1317237.21	40°11'59.676"N	104°30'08.568"W	polygon
GUTTERSEN D25-772 BHL FROM PLAN (200'FNL & 1240'FWL,SEC.13)	6786.00	11706.13	-764.33	3277922.80	1328917.59	40°13'55.181"N	104°30'16.400"W	point
GUTTERSEN D25-772 LP TPZ FROM PLAN (200'FNL & 1200'FWL,SEC.25)	6786.00	1161.71	-740.20	3277946.92	1318373.65	40°12'10.985"N	104°30'17.615"W	point
GUTTERSEN D25-772 LP TPZ rev-2 FROM PLAN (200'FNL & 1200'FWL,SEC.25)	6786.00	1162.53	-740.13	3277946.99	1318374.47	40°12'10.994"N	104°30'17.614"W	point
GUTTERSEN D25-772 rev-2 BHL FROM PLAN (200'FNL & 1240'FWL,SEC.13)	6786.00	11706.52	-764.28	3277922.85	1328917.99	40°13'55.185"N	104°30'16.399"W	point

WELLPATH COMPOSITION - Ref Wellbore: GUTTERSEN D25-772 AWB Ref Wellpath: GUTTERSEN D25-772 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1918.00	Gyrodata standard - Drop gyro or Multi-shot	Gyrodata Surface Surveys <82'-1918'>	GUTTERSEN D25-772 AWB
1918.00	17774.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	BHGE 8.5" Monobore with ATCurve <1990'-17774'>	GUTTERSEN D25-772 AWB
17774.00	17798.00	Blind Drilling (std)	Projection to bit	GUTTERSEN D25-772 AWB



Actual Wellpath Report

GUTTERSEN D25-772 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#03 GUTTERSEN D25-772 (1374'FNL & 1929'FWL,SEC.25)
Area	COLORADO	Well	GUTTERSEN D25-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	GUTTERSEN D25-772 AWB
Facility	SEC.25-T03N-R64W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1918.00	0.090	310.800	1917.94	Tied to 3rd Party Gyro Surface Surveys
1990.00	0.110	339.230	1989.94	First BHI MWD Survey
17774.00	90.120	1.510	6784.07	Last BHI MWD Survey
17798.00	90.120	1.510	6784.02	Projection to Bit