

Location:	COLORADO	Slot:	SLOT#03 HULLABALOO Y21-775(445'FNL&917'FWL,SEC.16)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	HULLABALOO Y21-775
Facility:	SEC 16-T02N-R64W	Wellbore:	HULLABALOO Y21-775 PWB

The Baker Hughes logo is located in the bottom right corner. It features a blue square icon with white curved lines, followed by the text "BAKER HUGHES" in bold black uppercase letters, and "noble energy" in red lowercase letters with a stylized "ne" monogram.[illegible]

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#03 HULLABALOO Y21-775(445'FNL&917'FWL,SEC.16)
Area	COLORADO	Well	HULLABALOO Y21-775
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWP
Facility	SEC.16-T02N-R64W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Cantryat
Scale	0.999959	Report Generated	11/2/2017 at 10:21:34 AM
Convergence at slot	0.61° East	Database/Source file	Denver/HULLABALOO_Y21-775_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2.85	75.52	3262018.08	1296891.43	40°08'40.416"N	104°33'45.828"W
Facility Reference Pt			3261942.56	1296894.28	40°08'40.452"N	104°33'46.800"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	4924.00ft
Horizontal Reference Pt	Slot	RIG (30'KB) (RKB) to Mean Sea Level	4924.00ft
Vertical Reference Pt	RIG (30'KB) (RKB)	RIG (30'KB) (RKB) to Ground Level at Slot (SLOT#03 HULLABALOO Y21-775 (445'FNL&917'FWL,SEC.16))	4924.00ft
MD Reference Pt	RIG (30'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	178.31°

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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWB
Facility	SEC.16-T02N-R64W		

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]
0.00	0.000	71.900	0.00	0.00	0.00	0.00	40°08'40.416"N	104°33'45.828"W	0.00
85.89	0.150	71.900	85.89	-0.03	0.03	0.11	40°08'40.416"N	104°33'45.827"W	0.17
182.02	0.670	47.500	182.02	-0.43	0.45	0.64	40°08'40.420"N	104°33'45.820"W	0.56
276.39	0.360	12.340	276.38	-1.08	1.12	1.11	40°08'40.427"N	104°33'45.814"W	0.45
371.03	0.720	297.120	371.02	-1.66	1.68	0.65	40°08'40.433"N	104°33'45.819"W	0.76
465.78	0.410	358.140	465.77	-2.28	2.29	0.10	40°08'40.439"N	104°33'45.826"W	0.67
560.21	0.360	325.180	560.19	-2.87	2.87	-0.08	40°08'40.444"N	104°33'45.829"W	0.24
654.92	0.870	299.350	654.90	-3.49	3.47	-0.87	40°08'40.450"N	104°33'45.839"W	0.60
749.51	0.650	308.530	749.48	-4.21	4.15	-1.92	40°08'40.457"N	104°33'45.852"W	0.27
843.99	0.390	2.760	843.96	-4.87	4.81	-2.32	40°08'40.464"N	104°33'45.857"W	0.56
938.69	0.450	14.230	938.65	-5.55	5.49	-2.22	40°08'40.470"N	104°33'45.856"W	0.11
1033.11	0.220	2.980	1033.07	-6.09	6.03	-2.11	40°08'40.476"N	104°33'45.854"W	0.25
1127.46	0.190	62.660	1127.42	-6.34	6.28	-1.97	40°08'40.478"N	104°33'45.852"W	0.22
1221.90	0.540	112.370	1221.86	-6.22	6.19	-1.42	40°08'40.477"N	104°33'45.845"W	0.47
1316.38	0.580	117.260	1316.34	-5.81	5.80	-0.58	40°08'40.473"N	104°33'45.835"W	0.07
1410.86	0.270	139.040	1410.81	-5.41	5.41	-0.01	40°08'40.469"N	104°33'45.827"W	0.36
1505.51	0.280	176.460	1505.46	-5.00	5.01	0.15	40°08'40.465"N	104°33'45.825"W	0.19
1599.91	0.430	200.840	1599.86	-4.45	4.45	0.04	40°08'40.460"N	104°33'45.827"W	0.22
1694.40	0.380	198.670	1694.35	-3.82	3.82	-0.19	40°08'40.454"N	104°33'45.830"W	0.06
1789.09	0.340	230.950	1789.04	-3.36	3.35	-0.50	40°08'40.449"N	104°33'45.834"W	0.22
1883.66	0.250	357.340	1883.61	-3.40	3.38	-0.73	40°08'40.449"N	104°33'45.837"W	0.56
1975.35	0.610	34.840	1975.29	-3.99	3.98	-0.46	40°08'40.455"N	104°33'45.833"W	0.48
2029.00	0.700	45.060	2028.94	-4.44	4.44	-0.07	40°08'40.460"N	104°33'45.828"W	0.27
2071.00	0.000	7.460	2070.94	-4.62	4.62	0.11	40°08'40.462"N	104°33'45.826"W	1.67
2165.00	0.000	7.460	2164.94	-4.62	4.62	0.11	40°08'40.462"N	104°33'45.826"W	0.00
2260.00	3.070	341.820	2259.89	-7.06	7.04	-0.68	40°08'40.486"N	104°33'45.836"W	3.23
2354.00	4.070	344.730	2353.71	-12.71	12.65	-2.34	40°08'40.541"N	104°33'45.856"W	1.08
2449.00	4.780	358.420	2448.43	-19.95	19.86	-3.34	40°08'40.613"N	104°33'45.868"W	1.33
2543.00	4.720	7.580	2542.11	-27.68	27.61	-2.94	40°08'40.689"N	104°33'45.862"W	0.81
2637.00	6.910	17.250	2635.62	-36.85	36.84	-0.75	40°08'40.780"N	104°33'45.833"W	2.54

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#03 HULLABALOO Y21-775(445'FNL&917'FWL,SEC.16)
Area	COLORADO	Well	HULLABALOO Y21-775
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWB
Facility	SEC.16-T02N-R64W		

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]
2732.00	7.330	18.880	2729.89	-47.93	48.04	2.90	40°08'40.890"N	104°33'45.784"W	0.49
2826.00	7.300	14.470	2823.12	-59.28	59.49	6.34	40°08'41.003"N	104°33'45.738"W	0.60
2921.00	7.290	11.180	2917.35	-70.95	71.25	9.01	40°08'41.119"N	104°33'45.702"W	0.44
3015.00	7.380	15.260	3010.59	-82.54	82.92	11.76	40°08'41.234"N	104°33'45.665"W	0.56
3110.00	7.240	15.540	3104.81	-94.10	94.58	14.97	40°08'41.349"N	104°33'45.622"W	0.15
3204.00	7.310	14.040	3198.06	-105.51	106.09	18.01	40°08'41.462"N	104°33'45.582"W	0.22
3299.00	7.310	14.240	3292.28	-117.14	117.81	20.96	40°08'41.578"N	104°33'45.542"W	0.03
3393.00	7.180	14.100	3385.53	-128.54	129.30	23.86	40°08'41.691"N	104°33'45.503"W	0.14
3488.00	7.350	19.710	3479.77	-139.91	140.78	27.36	40°08'41.804"N	104°33'45.457"W	0.77
3582.00	7.160	16.040	3573.02	-151.09	152.07	31.00	40°08'41.915"N	104°33'45.408"W	0.53
3677.00	7.250	14.380	3667.27	-162.49	163.57	34.13	40°08'42.029"N	104°33'45.366"W	0.24
3771.00	7.330	11.620	3760.51	-174.02	175.19	36.81	40°08'42.143"N	104°33'45.330"W	0.38
3866.00	7.240	15.940	3854.74	-185.63	186.88	39.67	40°08'42.259"N	104°33'45.292"W	0.58
3961.00	7.350	15.260	3948.98	-197.14	198.50	42.92	40°08'42.373"N	104°33'45.248"W	0.15
4055.00	8.150	348.550	4042.15	-209.47	210.83	43.18	40°08'42.495"N	104°33'45.243"W	3.89
4150.00	7.460	318.500	4136.30	-220.85	222.06	37.75	40°08'42.606"N	104°33'45.312"W	4.31
4244.00	7.200	327.990	4229.54	-230.62	231.62	30.59	40°08'42.702"N	104°33'45.403"W	1.32
4338.00	7.240	333.400	4322.80	-241.08	241.91	24.81	40°08'42.804"N	104°33'45.476"W	0.72
4433.00	7.220	342.160	4417.04	-252.24	252.95	20.30	40°08'42.913"N	104°33'45.532"W	1.16
4528.00	7.130	352.780	4511.30	-263.84	264.48	17.73	40°08'43.028"N	104°33'45.564"W	1.40
4622.00	7.210	0.950	4604.57	-275.54	276.17	17.10	40°08'43.143"N	104°33'45.570"W	1.09
4717.00	7.110	8.800	4698.83	-287.28	287.94	18.09	40°08'43.259"N	104°33'45.556"W	1.03
4811.00	7.140	23.690	4792.11	-298.28	299.04	21.33	40°08'43.369"N	104°33'45.513"W	1.96
4906.00	7.180	30.400	4886.37	-308.64	309.56	26.71	40°08'43.472"N	104°33'45.442"W	0.88
5000.00	7.400	29.890	4979.62	-318.78	319.88	32.70	40°08'43.573"N	104°33'45.363"W	0.24
5095.00	7.280	12.470	5073.85	-329.82	331.06	37.05	40°08'43.684"N	104°33'45.306"W	2.34
5189.00	7.320	344.980	5167.11	-341.43	342.66	36.78	40°08'43.798"N	104°33'45.308"W	3.68
5284.00	7.420	345.170	5261.33	-353.29	354.44	33.64	40°08'43.915"N	104°33'45.347"W	0.11
5379.00	7.460	356.690	5355.54	-365.43	366.53	31.72	40°08'44.035"N	104°33'45.370"W	1.57
5473.00	7.410	5.210	5448.75	-377.55	378.66	31.91	40°08'44.154"N	104°33'45.366"W	1.17

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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWB
Facility	SEC.16-T02N-R64W		

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]
5568.00	7.440	6.760	5542.95	-389.72	390.86	33.19	40°08'44.275"N	104°33'45.347"W	0.21
5662.00	7.400	10.710	5636.16	-401.65	402.86	35.04	40°08'44.393"N	104°33'45.322"W	0.54
5756.00	7.580	12.520	5729.36	-413.57	414.86	37.51	40°08'44.511"N	104°33'45.289"W	0.32
5851.00	7.640	7.680	5823.53	-425.87	427.23	39.71	40°08'44.634"N	104°33'45.259"W	0.68
5945.00	7.680	6.540	5916.69	-438.26	439.66	41.26	40°08'44.756"N	104°33'45.237"W	0.17
6040.00	7.620	6.030	6010.84	-450.78	452.23	42.64	40°08'44.880"N	104°33'45.217"W	0.10
6134.00	7.840	4.660	6103.99	-463.33	464.82	43.82	40°08'45.005"N	104°33'45.201"W	0.31
6229.00	7.620	1.730	6198.13	-476.05	477.58	44.53	40°08'45.131"N	104°33'45.190"W	0.48
6323.00	2.000	150.790	6291.89	-480.83	482.38	45.53	40°08'45.178"N	104°33'45.176"W	9.99
6418.00	10.820	161.740	6386.21	-470.80	472.45	49.14	40°08'45.079"N	104°33'45.131"W	9.33
6513.00	16.670	163.970	6478.45	-449.03	450.87	55.70	40°08'44.865"N	104°33'45.049"W	6.18
6607.00	25.080	169.850	6566.21	-416.20	418.24	62.95	40°08'44.542"N	104°33'44.961"W	9.21
6702.00	35.420	176.430	6648.18	-368.63	370.80	68.22	40°08'44.073"N	104°33'44.899"W	11.42
6796.00	44.040	182.830	6720.44	-308.69	310.84	68.31	40°08'43.480"N	104°33'44.906"W	10.14
6891.00	54.100	184.260	6782.60	-237.32	239.31	63.81	40°08'42.774"N	104°33'44.974"W	10.65
6986.00	63.510	183.350	6831.75	-156.52	158.31	58.45	40°08'41.974"N	104°33'45.054"W	9.94
7080.00	71.800	181.950	6867.46	-69.90	71.54	54.47	40°08'41.117"N	104°33'45.117"W	8.93
7175.00	80.530	180.460	6890.15	22.13	-20.59	52.55	40°08'40.207"N	104°33'45.154"W	9.31
7269.00	90.090	178.820	6897.83	115.68	-114.16	53.15	40°08'39.282"N	104°33'45.159"W	10.32
7364.00	90.120	177.890	6897.66	210.68	-209.12	55.88	40°08'38.344"N	104°33'45.137"W	0.98
7458.00	90.220	178.410	6897.38	304.68	-303.07	58.91	40°08'37.415"N	104°33'45.111"W	0.56
7553.00	89.970	177.520	6897.22	399.68	-398.01	62.28	40°08'36.477"N	104°33'45.080"W	0.97
7647.00	89.780	176.810	6897.42	493.66	-491.90	66.93	40°08'35.548"N	104°33'45.033"W	0.78
7742.00	89.880	176.260	6897.71	588.61	-586.72	72.68	40°08'34.611"N	104°33'44.972"W	0.59
7837.00	89.910	175.160	6897.88	683.51	-681.45	79.78	40°08'33.674"N	104°33'44.893"W	1.16
7931.00	90.000	175.630	6897.95	777.39	-775.15	87.33	40°08'32.747"N	104°33'44.809"W	0.51
8025.00	89.600	176.220	6898.28	871.31	-868.91	94.01	40°08'31.820"N	104°33'44.736"W	0.76
8120.00	89.880	177.740	6898.71	966.28	-963.78	99.01	40°08'30.882"N	104°33'44.684"W	1.63
8214.00	90.030	179.100	6898.79	1060.28	-1057.74	101.60	40°08'29.953"N	104°33'44.664"W	1.46
8309.00	90.060	179.380	6898.71	1155.26	-1152.73	102.87	40°08'29.015"N	104°33'44.660"W	0.30

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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWB
Facility	SEC.16-T02N-R64W		

WELLPATH DATA (183 stations)									
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8403.00	90.310	180.080	6898.41	1249.23	-1246.73	103.31	40°08'28.086"N	104°33'44.668"W	0.79
8498.00	89.880	181.430	6898.25	1344.14	-1341.72	102.06	40°08'27.147"N	104°33'44.697"W	1.49
8593.00	90.150	181.230	6898.23	1439.01	-1436.69	99.85	40°08'26.209"N	104°33'44.738"W	0.35
8687.00	90.060	181.780	6898.05	1532.87	-1530.66	97.38	40°08'25.281"N	104°33'44.782"W	0.59
8782.00	89.820	181.100	6898.15	1627.72	-1625.63	95.00	40°08'24.342"N	104°33'44.826"W	0.76
8876.00	89.880	180.240	6898.40	1721.64	-1719.62	93.90	40°08'23.414"N	104°33'44.853"W	0.92
8971.00	90.090	179.420	6898.42	1816.61	-1814.62	94.18	40°08'22.475"N	104°33'44.862"W	0.89
9065.00	90.310	178.160	6898.10	1910.60	-1908.60	96.16	40°08'21.546"N	104°33'44.850"W	1.36
9159.00	90.180	177.260	6897.69	2004.59	-2002.52	99.92	40°08'20.618"N	104°33'44.814"W	0.97
9254.00	90.280	175.750	6897.31	2099.54	-2097.34	105.71	40°08'19.680"N	104°33'44.752"W	1.59
9349.00	90.220	175.080	6896.90	2194.42	-2192.03	113.30	40°08'18.744"N	104°33'44.668"W	0.71
9444.00	90.220	175.750	6896.53	2289.30	-2286.73	120.90	40°08'17.807"N	104°33'44.583"W	0.71
9538.00	90.220	175.890	6896.17	2383.21	-2380.48	127.75	40°08'16.880"N	104°33'44.507"W	0.15
9633.00	90.150	176.190	6895.87	2478.13	-2475.25	134.31	40°08'15.943"N	104°33'44.436"W	0.32
9727.00	90.150	176.560	6895.62	2572.08	-2569.06	140.25	40°08'15.015"N	104°33'44.372"W	0.39
9822.00	90.090	177.070	6895.42	2667.05	-2663.91	145.53	40°08'14.077"N	104°33'44.317"W	0.54
9916.00	90.180	177.590	6895.20	2761.03	-2757.81	149.91	40°08'13.149"N	104°33'44.273"W	0.56
10011.00	90.180	177.170	6894.90	2856.02	-2852.71	154.25	40°08'12.211"N	104°33'44.230"W	0.44
10105.00	90.180	177.880	6894.61	2950.01	-2946.62	158.31	40°08'11.282"N	104°33'44.191"W	0.76
10200.00	90.180	178.830	6894.31	3045.01	-3041.58	161.04	40°08'10.344"N	104°33'44.169"W	1.00
10294.00	90.180	179.400	6894.01	3139.00	-3135.57	162.49	40°08'09.415"N	104°33'44.163"W	0.61
10389.00	89.850	180.140	6893.99	3233.97	-3230.57	162.87	40°08'08.476"N	104°33'44.171"W	0.85
10483.00	89.970	181.250	6894.13	3327.88	-3324.56	161.73	40°08'07.547"N	104°33'44.198"W	1.19
10578.00	90.090	181.650	6894.08	3422.74	-3419.53	159.33	40°08'06.609"N	104°33'44.242"W	0.44
10672.00	90.060	181.880	6893.96	3516.57	-3513.48	156.43	40°08'05.681"N	104°33'44.292"W	0.25
10767.00	90.060	182.130	6893.86	3611.37	-3608.43	153.11	40°08'04.743"N	104°33'44.348"W	0.26
10862.00	90.120	181.810	6893.71	3706.18	-3703.37	149.84	40°08'03.805"N	104°33'44.403"W	0.34
10956.00	90.060	181.130	6893.57	3800.03	-3797.34	147.43	40°08'02.877"N	104°33'44.447"W	0.73
11051.00	90.060	179.130	6893.47	3894.98	-3892.33	147.22	40°08'01.938"N	104°33'44.462"W	2.11
11145.00	90.000	178.590	6893.42	3988.98	-3986.31	149.09	40°08'01.010"N	104°33'44.451"W	0.58

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#03 HULLABALOO Y21-775(445'FNL&917'FWL,SEC.16)
Area	COLORADO	Well	HULLABALOO Y21-775
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWB
Facility	SEC.16-T02N-R64W		

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]
11334.00	90.060	179.270	6893.32	4177.96	-4175.28	152.62	40°07'59.142"N	104°33'44.431"W	0.36
11429.00	90.150	180.300	6893.14	4272.93	-4270.28	152.97	40°07'58.203"N	104°33'44.440"W	1.09
11616.00	90.030	178.630	6892.85	4459.89	-4457.26	154.72	40°07'56.355"N	104°33'44.443"W	0.90
11711.00	90.090	177.510	6892.75	4554.88	-4552.21	157.92	40°07'55.417"N	104°33'44.414"W	1.18
11805.00	90.000	177.570	6892.68	4648.88	-4646.12	161.95	40°07'54.488"N	104°33'44.375"W	0.12
11900.00	90.090	178.620	6892.60	4743.87	-4741.07	165.11	40°07'53.550"N	104°33'44.348"W	1.11
11994.00	90.090	179.070	6892.45	4837.87	-4835.05	167.01	40°07'52.621"N	104°33'44.336"W	0.48
12089.00	90.060	179.750	6892.33	4932.85	-4930.04	167.98	40°07'51.682"N	104°33'44.336"W	0.72
12183.00	90.030	177.660	6892.26	5026.84	-5024.01	170.11	40°07'50.753"N	104°33'44.322"W	2.22
12278.00	90.280	177.120	6892.00	5121.83	-5118.91	174.43	40°07'49.815"N	104°33'44.279"W	0.63
12373.00	90.220	176.620	6891.58	5216.80	-5213.77	179.62	40°07'48.877"N	104°33'44.225"W	0.53
12467.00	90.280	175.970	6891.17	5310.74	-5307.57	185.70	40°07'47.950"N	104°33'44.160"W	0.69
12562.00	90.220	176.810	6890.76	5405.68	-5402.38	191.68	40°07'47.012"N	104°33'44.096"W	0.89
12656.00	90.280	177.240	6890.35	5499.66	-5496.25	196.56	40°07'46.084"N	104°33'44.046"W	0.46
12751.00	90.400	177.380	6889.79	5594.64	-5591.15	201.01	40°07'45.146"N	104°33'44.001"W	0.19
12845.00	90.250	177.650	6889.25	5688.63	-5685.06	205.09	40°07'44.217"N	104°33'43.961"W	0.33
12940.00	90.310	177.620	6888.79	5783.63	-5779.98	209.01	40°07'43.279"N	104°33'43.924"W	0.07
13034.00	90.250	178.600	6888.33	5877.62	-5873.92	212.11	40°07'42.350"N	104°33'43.897"W	1.04
13129.00	89.910	179.160	6888.20	5972.62	-5968.90	213.97	40°07'41.412"N	104°33'43.886"W	0.69
13223.00	89.940	180.030	6888.32	6066.59	-6062.90	214.63	40°07'40.483"N	104°33'43.890"W	0.93
13318.00	89.880	181.620	6888.47	6161.50	-6157.89	213.26	40°07'39.544"N	104°33'43.921"W	1.67
13412.00	90.090	180.860	6888.49	6255.37	-6251.86	211.23	40°07'38.616"N	104°33'43.960"W	0.84
13506.00	90.000	179.910	6888.42	6349.31	-6345.86	210.60	40°07'37.687"N	104°33'43.980"W	1.02
13601.00	90.060	179.320	6888.37	6444.29	-6440.86	211.24	40°07'36.748"N	104°33'43.985"W	0.62
13696.00	90.180	178.490	6888.17	6539.28	-6535.84	213.05	40°07'35.810"N	104°33'43.975"W	0.88
13790.00	90.000	177.350	6888.02	6633.28	-6629.78	216.46	40°07'34.881"N	104°33'43.944"W	1.23
13885.00	89.940	177.320	6888.07	6728.26	-6724.67	220.88	40°07'33.943"N	104°33'43.900"W	0.07
13980.00	90.030	178.870	6888.10	6823.26	-6819.62	224.04	40°07'33.004"N	104°33'43.872"W	1.63
14074.00	90.340	179.810	6887.79	6917.24	-6913.61	225.12	40°07'32.075"N	104°33'43.871"W	1.05
14169.00	89.940	181.460	6887.56	7012.16	-7008.60	224.07	40°07'31.137"N	104°33'43.897"W	1.79

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#03 HULLABALOO Y21-775(445'FNL&917'FWL,SEC.16)
Area	COLORADO	Well	HULLABALOO Y21-775
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWB
Facility	SEC.16-T02N-R64W		

WELLPATH DATA (183 stations)									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]
14263.00	90.150	181.380	6887.49	7106.02	-7102.57	221.74	40°07'30.209"N	104°33'43.940"W	0.24
14358.00	90.090	180.620	6887.29	7200.92	-7197.56	220.08	40°07'29.270"N	104°33'43.974"W	0.80
14453.00	90.000	179.470	6887.21	7295.87	-7292.55	220.01	40°07'28.331"N	104°33'43.988"W	1.21
14547.00	90.060	178.720	6887.17	7389.86	-7386.54	221.49	40°07'27.402"N	104°33'43.982"W	0.80
14642.00	90.060	177.800	6887.07	7484.86	-7481.50	224.37	40°07'26.464"N	104°33'43.958"W	0.97
14736.00	90.000	176.560	6887.02	7578.84	-7575.38	229.00	40°07'25.536"N	104°33'43.911"W	1.32
14831.00	90.030	175.720	6886.99	7673.77	-7670.17	235.39	40°07'24.598"N	104°33'43.842"W	0.88
14926.00	90.000	175.770	6886.97	7768.68	-7764.90	242.44	40°07'23.661"N	104°33'43.764"W	0.06
15020.00	90.090	176.390	6886.89	7862.60	-7858.68	248.87	40°07'22.734"N	104°33'43.694"W	0.67
15115.00	90.120	176.840	6886.72	7957.56	-7953.52	254.48	40°07'21.796"N	104°33'43.634"W	0.47
15209.00	90.000	177.840	6886.62	8051.55	-8047.41	258.84	40°07'20.868"N	104°33'43.591"W	1.07
15304.00	90.180	179.450	6886.47	8146.54	-8142.38	261.09	40°07'19.929"N	104°33'43.575"W	1.71
15398.00	90.000	180.560	6886.32	8240.50	-8236.38	261.08	40°07'19.001"N	104°33'43.588"W	1.20
15493.00	90.090	181.310	6886.25	8335.40	-8331.37	259.53	40°07'18.062"N	104°33'43.621"W	0.80
15588.00	90.060	181.070	6886.12	8430.28	-8426.35	257.56	40°07'17.124"N	104°33'43.659"W	0.25
15682.00	89.940	180.120	6886.12	8524.20	-8520.34	256.58	40°07'16.195"N	104°33'43.685"W	1.02
15777.00	89.910	179.070	6886.25	8619.18	-8615.34	257.25	40°07'15.256"N	104°33'43.689"W	1.11
15871.00	89.970	177.830	6886.35	8713.18	-8709.30	259.79	40°07'14.328"N	104°33'43.669"W	1.32
15966.00	90.250	177.570	6886.17	8808.17	-8804.23	263.61	40°07'13.389"N	104°33'43.633"W	0.40
16061.00	90.150	178.200	6885.83	8903.17	-8899.16	267.11	40°07'12.451"N	104°33'43.601"W	0.67
16155.00	90.180	179.500	6885.56	8997.16	-8993.14	269.00	40°07'11.522"N	104°33'43.589"W	1.38
16250.00	90.220	181.950	6885.23	9092.07	-9088.12	267.80	40°07'10.583"N	104°33'43.618"W	2.58
16344.00	90.220	181.790	6884.87	9185.89	-9182.07	264.73	40°07'09.655"N	104°33'43.670"W	0.17
16439.00	90.280	180.190	6884.46	9280.78	-9277.05	263.09	40°07'08.717"N	104°33'43.704"W	1.69
16533.00	90.280	180.000	6884.00	9374.73	-9371.05	262.93	40°07'07.788"N	104°33'43.719"W	0.20
16628.00	90.280	179.150	6883.53	9469.71	-9466.05	263.64	40°07'06.849"N	104°33'43.723"W	0.89
16722.00	90.250	177.490	6883.10	9563.70	-9560.00	266.39	40°07'05.921"N	104°33'43.700"W	1.77
16817.00	89.910	177.730	6882.96	9658.69	-9654.92	270.35	40°07'04.982"N	104°33'43.662"W	0.44
16911.00	90.030	179.610	6883.01	9752.69	-9748.89	272.54	40°07'04.053"N	104°33'43.646"W	2.00
17006.00	89.910	179.480	6883.06	9847.67	-9843.89	273.29	40°07'03.115"N	104°33'43.650"W	0.19

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#03 HULLABALOO Y21-775(445'FNL&917'FWL,SEC.16)
Area	COLORADO	Well	HULLABALOO Y21-775
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWB
Facility	SEC.16-T02N-R64W		

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]
17100.00	90.060	180.120	6883.09	9941.63	-9937.89	273.62	40°07'02.186"N	104°33'43.658"W	0.70
17179.00	89.940	181.430	6883.09	10020.56	-10016.88	272.55	40°07'01.405"N	104°33'43.683"W	1.67
17203.00	89.940	181.430	6883.11	10044.52	-10040.87	271.95	40°07'01.168"N	104°33'43.694"W	0.00

HOLE & CASING SECTIONS - Ref Wellbore: HULLABALOO Y21-775 AWB Ref Wellpath: HULLABALOO Y21-775 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	2033.00	2003.00	30.00	2032.94	0.00	0.01	4.47	-0.03
8.5in Open Hole	30.00	17203.00	17173.00	30.00	6883.11	0.00	0.01	-10040.87	271.95

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#03 HULLABALOO Y21-775(445'FNL&917'FWL,SEC.16)
Area	COLORADO	Well	HULLABALOO Y21-775
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWB
Facility	SEC.16-T02N-R64W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
HULLABALOO Y21-787 SECTION 16	11.00	2.85	-75.52	3261942.56	1296894.28	40°08'40.452"N	104°33'46.800"W	polygon
HULLABALOO Y21-787 SECTION 21	11.00	2.85	-75.52	3261942.56	1296894.28	40°08'40.452"N	104°33'46.800"W	polygon
HULLABALOO Y21-775 BHL REV-2 (100'FSL&980'FWL,SEC.21)	6882.65	-10041.05	296.33	3262314.39	1286850.82	40°07'01.164"N	104°33'43.380"W	point
HULLABALOO Y21-775 BHL REV-1 (100'FSL&980'FWL,SEC.21)	6900.00	-10041.05	296.33	3262314.39	1286850.82	40°07'01.164"N	104°33'43.380"W	point
HULLABALOO Y21-775 LANDING POINT(550'FNL&990'FWL,SEC.16)	6900.00	-105.00	60.00	3262078.07	1296786.44	40°08'39.372"N	104°33'45.070"W	point
HULLABALOO Y21-787 SECTION 16 HARDLINE (460'SETBACK)	7201.00	2.85	-75.52	3261942.56	1296894.28	40°08'40.452"N	104°33'46.800"W	polygon
HULLABALOO Y21-787 SECTION 21 HARDLINE(460'SETBACK)	7201.00	2.85	-75.52	3261942.56	1296894.28	40°08'40.452"N	104°33'46.800"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: HULLABALOO Y21-775 AWB Ref Wellpath: HULLABALOO Y21-775 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	2029.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	Surface Gyros <85.89'-2029'>	HULLABALOO Y21-775 AWB
2029.00	17179.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	BHI/ATC OWSG, MWD+IFR+MSA 8.5' Hole <2071'-17179'>	HULLABALOO Y21-775 AWB
17179.00	17203.00	Blind Drilling (std)	Projection to bit	HULLABALOO Y21-775 AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#03 HULLABALOO Y21-775(445'FNL&917'FWL,SEC.16)
Area	COLORADO	Well	HULLABALOO Y21-775
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	HULLABALOO Y21-775 AWP
Facility	SEC.16-T02N-R64W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
2029.00	0.700	45.060	2028.94	Tied to Surface Surveys
17179.00	89.940	181.430	6883.09	Last BHGE MWD Survey
17203.00	89.940	181.430	6883.11	Projection to Bit

COMMENTS	
Wellpath general comments SURFACE LOCATION: NWNW 40.14456N 104.56273W API: 05-123-45241	