

Location:	COLORADO	Slot:	SLOT#09 WELLS RANCH AF07-659 (2313'FNL & 175'FEL, SEC.08)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	WELLS RANCH AF07-659
Facility:	SEC.08-T05N-R62W	Wellbore:	WELLS RANCH AF07-659 PWB

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BGGM (1900.0 to 2018.0) Dip: 66.96° Field: 52513.1 nT  
Magnetic North is 8.15 degrees East of True North (at 6/6/2017)  
Grid North is 0.75 degrees East of True North  
To correct azimuth from True to Grid subtract 0.75 degrees  
To correct azimuth from Magnetic to Grid add 7.40 degrees

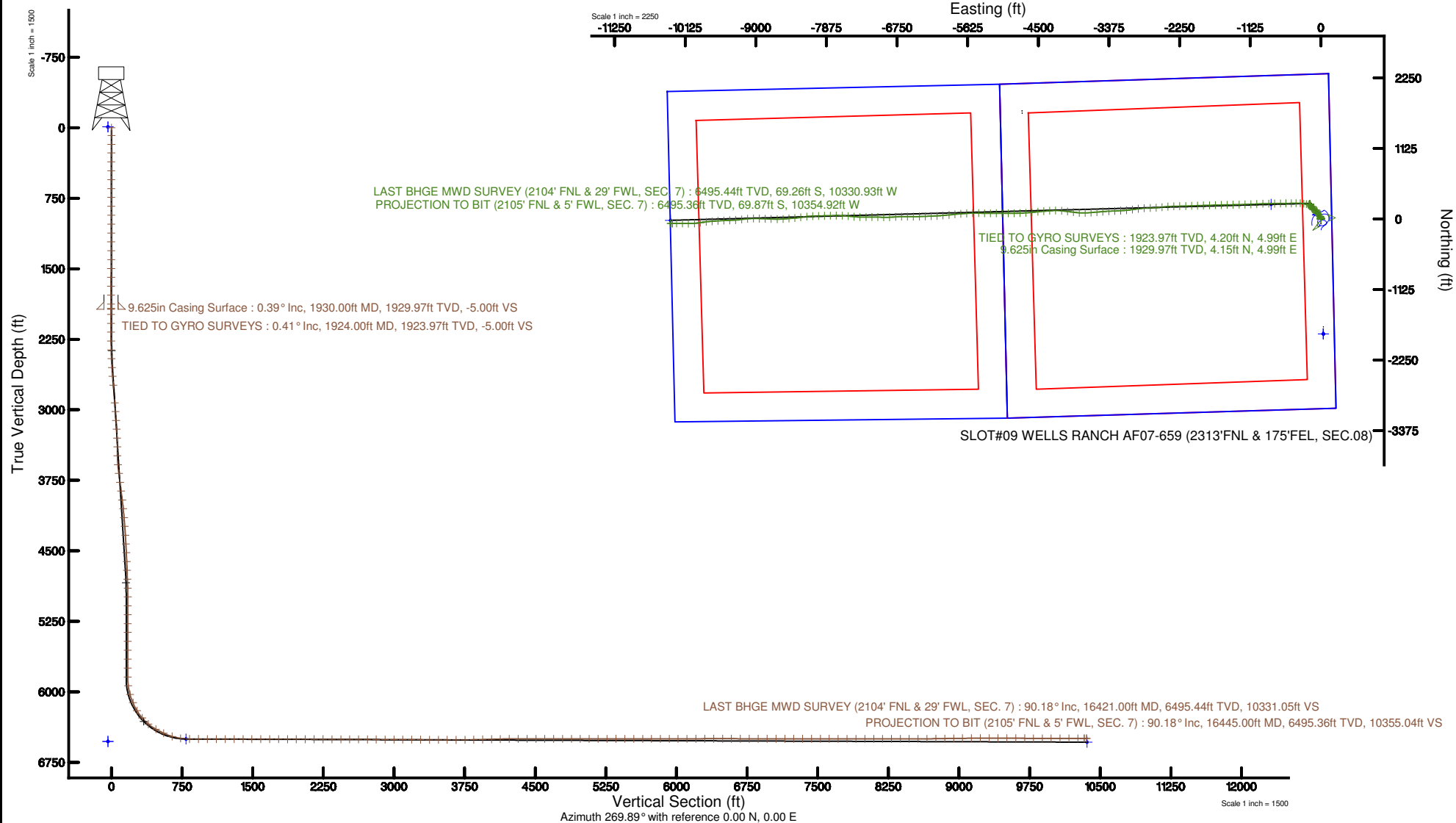
**BAKER  
HUGHES**  
a GE company



<p>Water column depths in WELLS 1000000 RANCH ARROYO AND PUEBLO (2014-15)</p> <p>Two vertical depths are referenced in WELLS 1000000 (2015)</p> <p>Horizontal depths are referenced in WELLS 1000000 (2014)</p> <p>WELLS 1000000 (2015) is Mason Lake, 475E, 346N</p> <p>Mean Sea Level to Neat line (at) Site 10-00000 WELLS RANCH ARROYO AND PUEBLO, NEUT, 0000: 0.00m</p> <p>Coordinates are in feet referenced in 1984</p>	<p>Over Station: 1000000 (1) Lambert Colorado 30°, Northern Zone (2011), US-NE</p> <p>North: Reference, South: null</p> <p>Scale: Feet, Distance</p> <p>Depth: are in feet</p> <p>Coordinates: copyright on 2017-08-05</p> <p>Drawings:</p>
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## Comments

SURFACE LOCATION: SENE
40.41517N
104.33836W
API #: 05-123-44246





# Actual Wellpath Report

WELLS RANCH AF07-659 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#09 WELLS RANCH AF07-659 (2313'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-659
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-659 AWB
Facility	SEC.08-T05N-R62W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Cantryat
Scale	0.999961	Report Generated	8/3/2017 at 10:58:59 AM
Convergence at slot	0.75° East	Database/Source file	Denver/WELLS_RANCH_AF07-659_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1690.61	4758.81	3323447.12	1396205.39	40°24'54.612"N	104°20'18.096"W
Facility Reference Pt			3318688.50	1397895.93	40°25'11.928"N	104°21'19.332"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	4735.00ft
Horizontal Reference Pt	Slot	RIG (30'KB) (RKB) to Mean Sea Level	4735.00ft
Vertical Reference Pt	RIG (30'KB) (RKB)	RIG (30'KB) (RKB) to Mud Line at Slot (SLOT#09 WELLS RANCH AF07-659 (2313'FNL & 175'FEL, SEC.08))	4735.00ft
MD Reference Pt	RIG (30'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.89°



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Facility	SEC.08-T05N-R62W		

WELLPATH DATA (176 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00	0.000	61.870	0.00	0.00	0.00	0.00	0.00	
82.00	0.340	61.870	82.00	-0.21	0.11	0.21	0.41	
177.00	0.770	17.850	177.00	-0.66	0.86	0.66	0.61	
269.00	0.350	38.310	268.99	-1.03	1.66	1.02	0.50	
363.00	0.460	71.650	362.99	-1.56	2.01	1.56	0.27	
458.00	0.400	43.200	457.99	-2.15	2.37	2.15	0.23	
552.00	0.130	289.560	551.99	-2.28	2.64	2.27	0.50	
647.00	0.320	283.900	646.98	-1.92	2.74	1.91	0.20	
741.00	0.080	290.980	740.98	-1.60	2.83	1.60	0.26	
836.00	0.500	45.650	835.98	-1.84	3.14	1.83	0.57	
931.00	0.260	101.530	930.98	-2.35	3.39	2.34	0.44	
1025.00	0.380	61.870	1024.98	-2.83	3.50	2.82	0.26	
1120.00	0.130	166.540	1119.98	-3.13	3.54	3.13	0.45	
1214.00	0.020	36.570	1213.98	-3.17	3.45	3.16	0.15	
1309.00	0.060	275.760	1308.98	-3.13	3.47	3.12	0.08	
1404.00	0.050	328.480	1403.98	-3.06	3.51	3.05	0.05	
1498.00	0.290	71.260	1497.98	-3.26	3.62	3.25	0.32	
1592.00	0.290	20.510	1591.98	-3.57	3.92	3.56	0.26	
1687.00	0.330	63.970	1686.98	-3.90	4.26	3.89	0.24	
1782.00	0.330	77.910	1781.97	-4.41	4.44	4.41	0.08	
1876.00	0.290	111.180	1875.97	-4.90	4.41	4.89	0.19	
1924.00	0.410	184.170	1923.97	-5.00	4.20	4.99	0.89	TIED TO GYRO SURVEYS
1985.00	0.200	205.810	1984.97	-4.94	3.88	4.93	0.39	
2080.00	0.040	278.840	2079.97	-4.83	3.74	4.83	0.20	
2174.00	0.110	1.460	2173.97	-4.80	3.83	4.80	0.12	
2269.00	2.580	332.360	2268.94	-3.82	5.82	3.81	2.62	
2363.00	4.080	348.690	2362.78	-2.19	10.97	2.17	1.87	
2458.00	7.410	344.170	2457.29	0.13	20.18	-0.17	3.53	
2552.00	7.510	330.000	2550.50	4.83	31.34	-4.89	1.96	
2647.00	7.460	322.270	2644.69	11.69	41.59	-11.77	1.06	



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Area	COLORADO	Well	WELLS RANCH AF07-659
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-659 AWB
Facility	SEC.08-T05N-R62W		

WELLPATH DATA (176 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2741.00	7.390	317.800	2737.91	19.46	50.90	-19.57	0.62	
2931.00	7.110	318.130	2926.39	35.48	68.70	-35.62	0.15	
3025.00	7.020	325.570	3019.68	42.60	77.77	-42.75	0.98	
3120.00	6.980	326.520	3113.97	49.04	87.38	-49.22	0.13	
3214.00	6.890	328.920	3207.28	55.09	96.97	-55.28	0.32	
3309.00	6.770	341.890	3301.61	59.75	107.17	-59.96	1.63	
3403.00	6.970	355.940	3394.94	61.85	118.13	-62.09	1.80	
3498.00	7.140	348.560	3489.23	63.41	129.66	-63.67	0.97	
3593.00	7.460	317.260	3583.49	68.75	139.98	-69.03	4.15	
3687.00	7.810	284.330	3676.70	79.07	146.05	-79.36	4.61	
3782.00	7.060	263.440	3770.92	91.12	146.98	-91.42	2.93	
3876.00	7.040	272.350	3864.21	102.62	146.56	-102.91	1.16	
3971.00	6.830	281.850	3958.52	113.96	147.96	-114.26	1.23	
4065.00	7.450	302.540	4051.81	124.56	152.38	-124.87	2.80	
4160.00	7.500	321.930	4146.01	133.56	160.58	-133.88	2.64	
4254.00	7.570	324.900	4239.20	140.89	170.47	-141.23	0.42	
4349.00	7.520	329.790	4333.38	147.59	180.96	-147.95	0.68	
4443.00	7.490	337.060	4426.58	153.05	191.92	-153.44	1.01	
4538.00	7.310	338.460	4520.79	157.66	203.25	-158.07	0.27	
4632.00	7.270	338.970	4614.03	161.97	214.36	-162.40	0.08	
4727.00	6.290	341.110	4708.36	165.79	224.90	-166.24	1.07	
4821.00	4.990	338.460	4801.91	168.94	233.57	-169.41	1.41	
4916.00	2.350	298.460	4896.72	172.16	238.34	-172.64	3.71	
5010.00	1.660	161.400	4990.69	173.43	237.97	-173.90	3.98	
5105.00	0.030	148.560	5085.68	172.98	236.65	-173.45	1.72	
5199.00	0.120	178.100	5179.68	172.96	236.53	-173.43	0.10	
5294.00	0.090	136.320	5274.68	172.91	236.37	-173.38	0.08	
5388.00	0.030	135.250	5368.68	172.84	236.30	-173.31	0.06	
5483.00	0.070	145.180	5463.68	172.79	236.24	-173.26	0.04	
5577.00	0.040	172.680	5557.68	172.75	236.16	-173.22	0.04	



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-659 AWB
Facility	SEC.08-T05N-R62W		

## WELLPATH DATA (176 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5672.00	0.100	140.220	5652.68	172.69	236.06	-173.16	0.07	
5767.00	0.130	131.720	5747.68	172.56	235.92	-173.03	0.04	
5861.00	0.530	183.530	5841.67	172.51	235.42	-172.98	0.49	
5956.00	7.180	248.340	5936.42	178.07	232.79	-178.53	7.34	
6050.00	16.660	271.600	6028.33	197.05	230.99	-197.51	11.11	
6144.00	23.850	286.180	6116.51	228.82	236.67	-229.29	9.29	
6239.00	30.650	279.490	6200.94	271.19	246.03	-271.68	7.84	
6334.00	40.600	271.710	6278.10	326.13	250.96	-326.63	11.49	
6428.00	50.260	269.340	6344.00	393.00	251.46	-393.50	10.43	
6523.00	61.050	269.440	6397.51	471.32	250.63	-471.82	11.36	
6617.00	64.810	269.570	6440.28	555.01	249.91	-555.50	4.00	
6712.00	73.040	269.010	6474.42	643.57	248.80	-644.07	8.68	
6806.00	81.660	268.600	6494.98	735.19	246.88	-735.68	9.18	
6901.00	89.910	269.680	6501.96	829.84	245.46	-830.33	8.76	
6995.00	90.000	267.970	6502.03	923.82	243.54	-924.30	1.82	
7090.00	89.850	267.360	6502.16	1018.75	239.67	-1019.22	0.66	
7185.00	89.940	267.500	6502.33	1113.66	235.41	-1114.13	0.18	
7279.00	90.030	268.530	6502.36	1207.61	232.15	-1208.07	1.10	
7374.00	89.820	268.750	6502.48	1302.58	229.90	-1303.04	0.32	
7469.00	89.850	268.740	6502.75	1397.57	227.82	-1398.02	0.03	
7563.00	89.850	269.130	6503.00	1491.55	226.07	-1492.00	0.41	
7658.00	89.910	268.390	6503.20	1586.53	224.01	-1586.98	0.78	
7752.00	89.880	268.570	6503.37	1680.50	221.52	-1680.95	0.19	
7846.00	89.880	268.800	6503.57	1774.48	219.36	-1774.92	0.24	
7941.00	89.750	267.870	6503.88	1869.45	216.60	-1869.88	0.99	
8035.00	90.000	267.950	6504.08	1963.39	213.17	-1963.82	0.28	
8130.00	89.850	267.920	6504.20	2058.34	209.75	-2058.76	0.16	
8224.00	90.060	268.600	6504.28	2152.30	206.90	-2152.71	0.76	
8319.00	89.780	269.330	6504.41	2247.28	205.18	-2247.70	0.82	
8413.00	89.780	268.440	6504.77	2341.27	203.35	-2341.68	0.95	



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-659 AWB
Facility	SEC.08-T05N-R62W		

## WELLPATH DATA (176 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8508.00	89.720	265.510	6505.19	2436.13	198.34	-2436.53	3.08	
8602.00	89.690	263.950	6505.67	2529.75	189.70	-2530.13	1.66	
8697.00	89.850	265.380	6506.05	2624.35	180.87	-2624.72	1.51	
8791.00	89.660	268.710	6506.45	2718.22	176.03	-2718.58	3.55	
8885.00	89.660	267.560	6507.01	2812.18	172.97	-2812.52	1.22	
8980.00	89.720	261.370	6507.53	2906.70	163.81	-2907.03	6.52	
9074.00	89.750	262.350	6507.96	2999.78	150.50	-3000.09	1.04	
9169.00	89.910	264.890	6508.24	3094.20	139.94	-3094.49	2.68	
9263.00	89.690	267.720	6508.57	3188.01	133.89	-3188.28	3.02	
9358.00	89.630	266.760	6509.13	3282.91	129.31	-3283.17	1.01	
9452.00	89.690	267.570	6509.69	3376.80	124.66	-3377.05	0.86	
9547.00	89.780	265.590	6510.13	3471.63	119.00	-3471.88	2.09	
9641.00	89.510	265.240	6510.71	3565.35	111.48	-3565.58	0.47	
9735.00	89.570	264.340	6511.47	3658.97	102.95	-3659.18	0.96	
9830.00	91.110	268.710	6510.91	3753.78	97.19	-3753.98	4.88	
9924.00	91.230	274.670	6508.98	3847.67	99.96	-3847.88	6.34	
10019.00	91.290	277.240	6506.89	3942.11	109.81	-3942.33	2.71	
10114.00	91.540	276.940	6504.55	4036.33	121.54	-4036.58	0.41	
10208.00	91.420	275.430	6502.12	4129.73	131.66	-4130.00	1.61	
10303.00	89.820	269.080	6501.09	4224.59	135.39	-4224.87	6.89	
10397.00	90.340	265.620	6500.96	4318.48	131.05	-4318.75	3.72	
10492.00	90.000	265.960	6500.68	4413.24	124.08	-4413.49	0.51	
10587.00	90.400	264.390	6500.35	4507.91	116.08	-4508.15	1.71	
10681.00	89.850	264.540	6500.14	4601.49	107.02	-4601.72	0.61	
10776.00	90.250	265.820	6500.06	4696.17	99.04	-4696.38	1.41	
10870.00	90.180	267.480	6499.71	4790.02	93.54	-4790.21	1.77	
10965.00	89.940	268.510	6499.61	4884.96	90.22	-4885.15	1.11	
11059.00	89.850	270.820	6499.78	4978.96	89.67	-4979.15	2.46	
11154.00	90.030	271.420	6499.88	5073.93	91.53	-5074.13	0.66	
11248.00	90.090	270.030	6499.78	5167.92	92.72	-5168.12	1.48	



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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11343.00	90.150	268.630	6499.58	5262.91	91.61	-5263.11	1.48	
11438.00	89.910	271.360	6499.53	5357.91	91.60	-5358.10	2.88	
11532.00	90.000	271.750	6499.61	5451.87	94.15	-5452.06	0.43	
11627.00	90.000	268.260	6499.61	5546.85	94.16	-5547.05	3.67	
11721.00	89.910	266.170	6499.68	5640.74	89.59	-5640.93	2.23	
11815.00	89.820	266.450	6499.90	5734.56	83.54	-5734.74	0.31	
11910.00	90.030	263.420	6500.03	5829.19	75.15	-5829.36	3.20	
12005.00	90.060	265.230	6499.95	5923.74	65.76	-5923.89	1.91	
12099.00	90.090	265.220	6499.83	6017.43	57.93	-6017.56	0.03	
12194.00	90.060	266.300	6499.70	6112.18	50.91	-6112.30	1.14	
12288.00	90.150	267.750	6499.53	6206.06	46.03	-6206.17	1.55	
12383.00	90.280	268.130	6499.17	6301.01	42.62	-6301.11	0.42	
12477.00	89.970	268.610	6498.97	6394.98	39.94	-6395.07	0.61	
12572.00	90.030	268.760	6498.97	6489.95	37.76	-6490.04	0.17	
12666.00	89.850	270.670	6499.07	6583.95	37.30	-6584.04	2.04	
12761.00	89.940	269.840	6499.24	6678.95	37.72	-6679.04	0.88	
12855.00	89.880	265.950	6499.39	6772.87	34.27	-6772.95	4.14	
12950.00	90.030	267.140	6499.46	6867.71	28.54	-6867.78	1.26	
13045.00	89.970	271.780	6499.46	6962.68	27.65	-6962.75	4.88	
13139.00	89.970	272.030	6499.51	7056.62	30.77	-7056.70	0.27	
13234.00	90.000	270.070	6499.54	7151.60	32.51	-7151.68	2.06	
13328.00	90.000	268.120	6499.54	7245.58	31.03	-7245.66	2.07	
13423.00	90.060	271.520	6499.49	7340.57	30.73	-7340.65	3.58	
13517.00	90.000	275.900	6499.44	7434.34	36.81	-7434.43	4.66	
13612.00	90.030	276.050	6499.41	7528.80	46.70	-7528.91	0.16	
13706.00	89.970	272.830	6499.41	7622.49	53.98	-7622.62	3.43	
13801.00	89.820	268.880	6499.59	7717.46	55.39	-7717.59	4.16	
13895.00	89.880	268.960	6499.83	7811.45	53.62	-7811.57	0.11	
13990.00	89.850	268.960	6500.06	7906.43	51.90	-7906.55	0.03	
14084.00	89.880	267.730	6500.28	8000.40	49.18	-8000.51	1.31	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#09 WELLS RANCH AF07-659 (2313'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-659
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-659 AWB
Facility	SEC.08-T05N-R62W		

## WELLPATH DATA (176 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
14179.00	89.880	268.310	6500.48	8095.35	45.90	-8095.45	0.61	
14273.00	89.780	263.740	6500.76	8189.11	39.39	-8189.20	4.86	
14368.00	90.030	260.860	6500.92	8283.27	26.66	-8283.34	3.04	
14462.00	89.940	265.840	6500.94	8376.63	15.78	-8376.67	5.30	
14557.00	89.910	265.030	6501.06	8471.34	8.21	-8471.37	0.85	
14652.00	90.060	266.490	6501.09	8566.09	1.19	-8566.11	1.54	
14746.00	90.950	270.090	6500.26	8660.03	-1.61	-8660.05	3.94	
14841.00	90.920	271.880	6498.71	8755.00	0.02	-8755.02	1.88	
14935.00	91.050	272.340	6497.09	8848.91	3.48	-8848.94	0.51	
15030.00	91.230	271.480	6495.20	8943.84	6.65	-8943.87	0.92	
15124.00	89.940	269.380	6494.24	9037.82	7.35	-9037.85	2.62	
15219.00	90.310	266.350	6494.04	9132.75	3.81	-9132.77	3.21	
15313.00	89.940	260.930	6493.83	9226.16	-6.60	-9226.16	5.78	
15408.00	90.090	267.390	6493.81	9320.63	-16.26	-9320.62	6.80	
15502.00	90.060	268.290	6493.68	9414.57	-19.80	-9414.55	0.96	
15596.00	89.820	266.570	6493.78	9508.48	-24.02	-9508.45	1.85	
15691.00	90.030	266.120	6493.91	9603.30	-30.07	-9603.26	0.52	
15785.00	89.600	267.110	6494.21	9697.14	-35.62	-9697.09	1.15	
15880.00	89.570	261.680	6494.90	9791.67	-44.90	-9791.60	5.72	
15974.00	89.940	261.970	6495.30	9884.74	-58.26	-9884.64	0.50	
16069.00	89.880	265.420	6495.45	9979.17	-68.69	-9979.05	3.63	
16163.00	90.060	270.670	6495.50	10073.09	-71.90	-10072.97	5.59	
16258.00	89.940	271.500	6495.50	10168.07	-70.10	-10167.95	0.88	
16352.00	90.000	270.350	6495.55	10262.05	-68.58	-10261.94	1.23	
16421.00	90.180	268.530	6495.44	10331.05	-69.26	-10330.93	2.65	LAST BHGE MWD SURVEY (2104' FNL & 29' FWL, SEC. 7)
16445.00	90.180	268.530	6495.36	10355.04	-69.87	-10354.92	0.00	PROJECTION TO BIT (2105' FNL & 5' FWL, SEC. 7)





# Actual Wellpath Report

WELLS RANCH AF07-659 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#09 WELLS RANCH AF07-659 (2313'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-659
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-659 AWB
Facility	SEC.08-T05N-R62W		

HOLE & CASING SECTIONS - Ref Wellbore: WELLS RANCH AF07-659 AWB Ref Wellpath: WELLS RANCH AF07-659 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	1930.00	1900.00	30.00	1929.97	0.02	0.03	4.15	4.99
8.5in Open Hole	30.00	16445.00	16415.00	30.00	6495.36	0.02	0.03	-69.87	-10354.92

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.07-T05N-R62W	-9.00	-1832.12	40.71	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
SEC.08-T05N-R62W	-9.00	-1832.12	40.71	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
WELLS RANCH AF07-659 LANDING POINT REV-2	6502.00	233.10	-791.40	3322655.76	1396438.48	40°24'57.018"N	104°20'28.287"W	point
SEC.07-T05N-R62W 460' SETBACKS	6528.00	-1832.12	40.71	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
SEC.08-T05N-R62W 460'SETBACKS	6528.00	-1832.12	40.71	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
WELLS RANCH AF07-659 BHL REV-2 (2055'FNL & 1'FWL, SEC.07)	6535.41	-20.59	-10359.26	3313088.28	1396184.80	40°24'55.728"N	104°22'32.016"W	point

WELLPATH COMPOSITION - Ref Wellbore: WELLS RANCH AF07-659 AWB Ref Wellpath: WELLS RANCH AF07-659 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1924.00	Gyrodatta relative depth - Drop gyro or Multi-shot	3rd Party Surface Gyro <82'-1924'>	WELLS RANCH AF07-659 AWB
1924.00	16421.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	BHI/ATC OWSG MWD rev2+IFR1+MSA 8.5" Hole <1985'-16421'>	WELLS RANCH AF07-659 AWB
16421.00	16445.00	Blind Drilling (std)	Projection to bit	WELLS RANCH AF07-659 AWB



## Actual Wellpath Report

WELLS RANCH AF07-659 AWP

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Operator	NOBLE ENERGY, INC	Slot	SLOT#09 WELLS RANCH AF07-659 (2313'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-659
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-659 AWB
Facility	SEC.08-T05N-R62W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1924.00	0.410	184.170	1923.97	TIED TO GYRO SURVEYS
16421.00	90.180	268.530	6495.44	LAST BHGE MWD SURVEY (2104' FNL & 29' FWL, SEC. 7)
16445.00	90.180	268.530	6495.36	PROJECTION TO BIT (2105' FNL & 5' FWL, SEC. 7)

COMMENTS	
<b>Wellpath general comments</b> SURFACE LOCATION: SENE 40.41517N 104.33836W API #: 05-123-44246	