

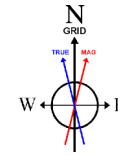
NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
 Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: WELLS RANCH AF07-666
 Facility: SEC.08-T05N-R62W Wellbore: WELLS RANCH AF07-666 PWB

Plot reference wellbore is WELLS RANCH AF07-666 (REV 4.0) PWB	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (S11), U.S. feet
True vertical depths are referenced to RIG (2010) (RIG)	North Reference: Grid north
Measured depths are referenced to RIG (2010) (RIG)	Scale: True distance
RIG (2010) (RIG) to Mean Sea Level: 4735 feet	Depths are in feet
Mean Sea Level to Mudline (in Slot SLOT#10 WELLS RANCH AF07-666 (2017)N & 175'FEL, SEC.08): 0 feet	Created by: cadbury on 2017-08-03
Coordinates are in feet referenced to Slot	Database: Cadbury

Comments

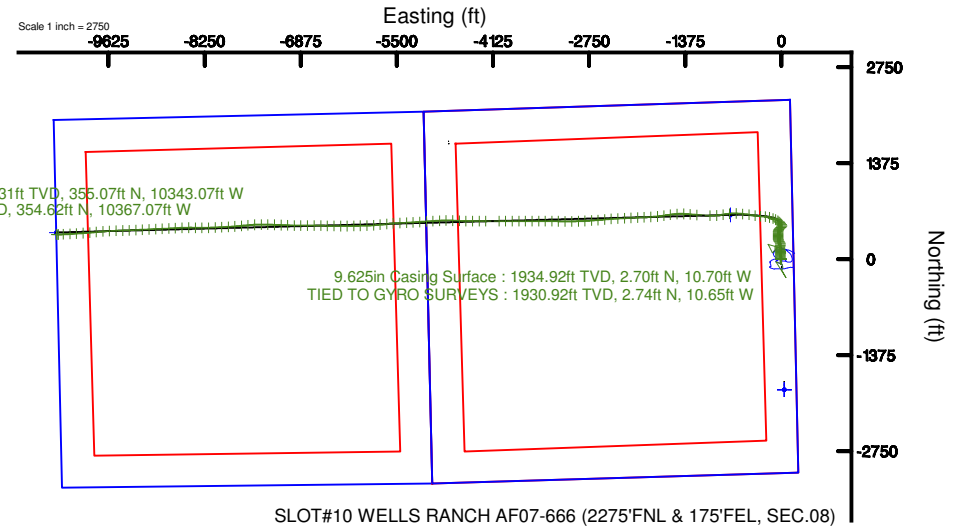
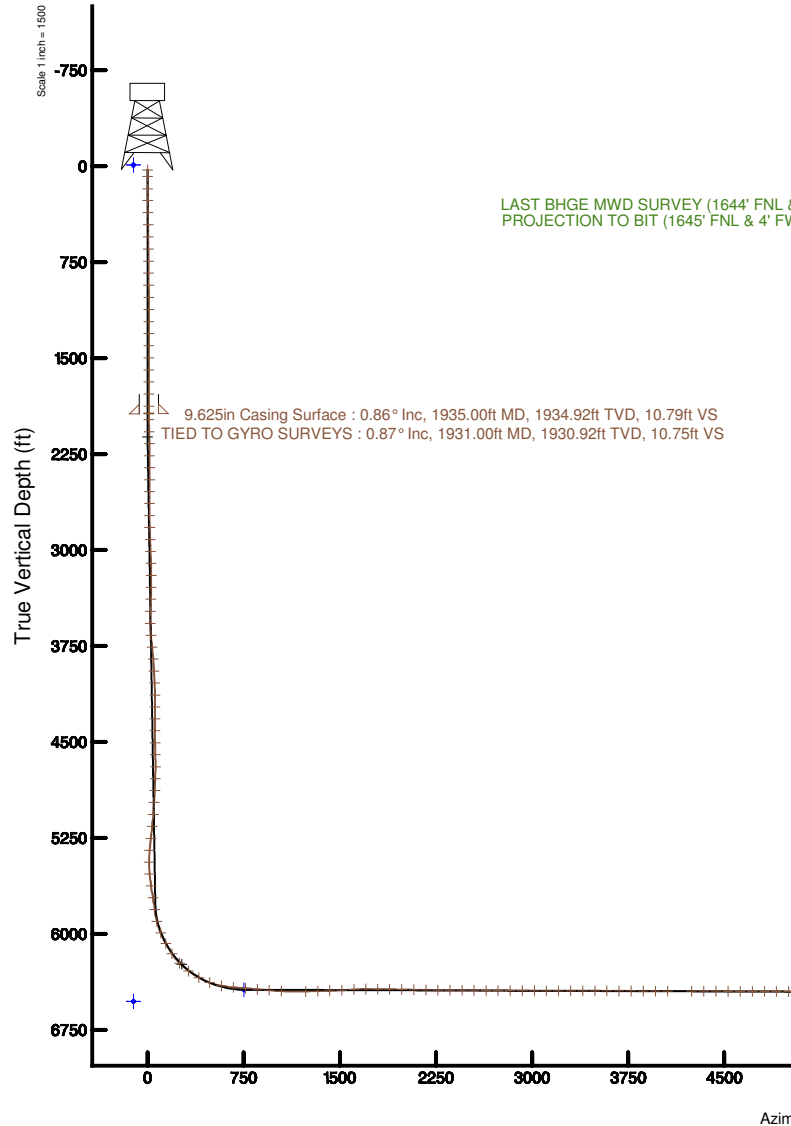
SURFACE LOCATION: SENE
 40.41527N
 104.33836W
 API #: 05-123-44240



BAKER HUGHES
 a GE company



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



LAST BHGE MWD SURVEY (1644' FNL & 28' FWL, SEC. 07) : 89.82° Inc, 16516.00ft MD, 6469.31ft TVD, 10349.13ft VS
 PROJECTION TO BIT (1645' FNL & 4' FWL, SEC. 07) : 89.82° Inc, 16540.00ft MD, 6469.39ft TVD, 10373.09ft VS

Scale 1 inch = 1500



Actual Wellpath Report

WELLS RANCH AF07-666 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 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 10:18:25 AM
Convergence at slot	0.75° East	Database/Source file	Denver/WELLS_RANCH_AF07-666_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1654.18	4758.34	3323446.65	1396241.82	40°24'54.972"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#10 WELLS RANCH AF07-666 (2275'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	272.12°



Actual Wellpath Report

WELLS RANCH AF07-666 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 AWB
Facility	SEC.08-T05N-R62W		

WELLPATH DATA (177 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	248.880	0.00	0.00	0.00	0.00	0.00	
30.00	0.000	248.880	30.00	0.00	0.00	0.00	0.00	
81.00	0.330	248.880	81.00	0.13	-0.05	-0.14	0.65	
178.00	0.540	261.610	178.00	0.84	-0.22	-0.85	0.24	
269.00	0.810	266.340	268.99	1.90	-0.32	-1.92	0.30	
364.00	0.910	277.590	363.98	3.32	-0.27	-3.33	0.21	
458.00	0.990	277.760	457.97	4.87	-0.06	-4.88	0.09	
553.00	0.550	290.770	552.96	6.12	0.21	-6.12	0.50	
647.00	0.580	243.360	646.95	6.97	0.16	-6.96	0.48	
742.00	0.380	229.260	741.95	7.62	-0.26	-7.63	0.24	
836.00	0.660	277.170	835.95	8.39	-0.40	-8.41	0.53	
931.00	0.720	312.170	930.94	9.39	0.07	-9.39	0.44	
1025.00	0.520	354.540	1024.94	9.90	0.89	-9.87	0.52	
1120.00	0.620	324.680	1119.93	10.27	1.74	-10.21	0.33	
1215.00	0.250	354.640	1214.93	10.61	2.37	-10.53	0.44	
1309.00	0.170	0.470	1308.93	10.64	2.71	-10.54	0.09	
1403.00	0.190	82.340	1402.93	10.49	2.87	-10.39	0.25	
1498.00	0.230	61.260	1497.93	10.17	2.98	-10.06	0.09	
1593.00	0.230	11.290	1592.93	9.97	3.26	-9.86	0.20	
1687.00	0.030	238.370	1686.93	9.96	3.43	-9.84	0.27	
1782.00	0.020	272.330	1781.93	10.00	3.42	-9.88	0.02	
1876.00	0.460	229.200	1875.92	10.29	3.18	-10.18	0.47	
1931.00	0.870	226.290	1930.92	10.75	2.74	-10.65	0.75	TIED TO GYRO SURVEYS
1981.00	0.880	251.420	1980.92	11.37	2.36	-11.29	0.76	
2076.00	4.020	339.130	2075.83	13.35	5.24	-13.17	4.30	
2170.00	6.870	356.060	2169.40	15.23	13.93	-14.73	3.45	
2265.00	8.690	0.710	2263.53	16.01	26.77	-15.03	2.03	
2359.00	8.560	358.670	2356.46	16.61	40.87	-15.11	0.35	
2454.00	8.460	4.770	2450.42	16.71	54.90	-14.69	0.96	
2548.00	8.560	6.200	2543.39	15.89	68.75	-13.36	0.25	



Actual Wellpath Report

WELLS RANCH AF07-666 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 AWB
Facility	SEC.08-T05N-R62W		

WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2643.00	8.600	3.600	2637.32	15.20	82.87	-12.15	0.41	
2737.00	8.610	358.880	2730.27	15.42	96.91	-11.84	0.75	
2832.00	8.760	351.770	2824.18	17.12	111.18	-13.02	1.14	
2927.00	8.720	346.100	2918.08	20.41	125.33	-15.78	0.91	
3021.00	8.570	349.360	3011.01	23.92	139.13	-18.79	0.55	
3116.00	8.770	347.630	3104.92	27.30	153.17	-21.65	0.35	
3211.00	7.940	1.070	3198.92	29.23	166.80	-23.08	2.23	
3305.00	7.520	9.510	3292.07	28.56	179.36	-21.94	1.29	
3399.00	7.770	18.490	3385.24	25.97	191.45	-18.91	1.30	
3494.00	8.790	17.480	3479.25	22.24	204.47	-14.69	1.08	
3589.00	9.070	353.900	3573.13	21.39	218.84	-13.31	3.84	
3683.00	10.330	332.290	3665.81	26.64	233.67	-18.01	4.07	
3778.00	8.870	317.870	3759.50	35.99	246.65	-26.89	2.95	
3872.00	8.580	329.450	3852.41	44.83	258.06	-35.32	1.89	
3967.00	8.460	341.580	3946.37	51.11	270.80	-41.13	1.89	
4061.00	8.610	346.860	4039.33	55.39	284.21	-44.91	0.85	
4156.00	8.510	354.710	4133.28	58.17	298.14	-47.18	1.23	
4250.00	8.660	6.460	4226.23	58.53	312.09	-47.02	1.87	
4345.00	8.830	3.380	4320.13	57.83	326.48	-45.79	0.52	
4439.00	8.860	0.290	4413.01	57.90	340.92	-45.32	0.51	
4534.00	8.810	352.950	4506.89	59.29	355.46	-46.18	1.19	
4628.00	8.770	354.600	4599.78	61.38	369.74	-47.74	0.27	
4723.00	8.710	2.580	4693.68	62.27	384.13	-48.10	1.28	
4817.00	8.760	16.780	4786.61	60.40	398.10	-45.71	2.29	
4912.00	8.820	18.010	4880.49	56.57	411.95	-41.37	0.21	
5006.00	8.630	25.240	4973.40	51.83	425.18	-36.13	1.18	
5101.00	7.740	37.450	5067.44	45.33	436.71	-29.20	2.05	
5195.00	8.050	49.360	5160.56	36.84	446.02	-20.36	1.77	
5290.00	8.680	57.430	5254.55	26.06	454.21	-9.27	1.40	
5384.00	8.940	33.270	5347.47	16.44	464.14	0.72	3.92	



Actual Wellpath Report

WELLS RANCH AF07-666 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 AWB
Facility	SEC.08-T05N-R62W		

WELLPATH DATA (177 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5479.00	10.870	2.760	5441.12	12.52	479.27	5.20	5.80	
5573.00	12.950	338.920	5533.14	16.58	497.97	1.84	5.63	
5668.00	12.590	319.750	5625.83	27.75	515.81	-8.69	4.46	
5763.00	10.970	304.650	5718.85	42.35	528.85	-22.82	3.65	
5857.00	9.210	309.540	5811.40	55.87	538.73	-35.98	2.08	
5952.00	16.420	305.980	5903.97	73.08	551.47	-52.73	7.63	
6046.00	24.720	294.100	5991.94	102.40	567.34	-81.48	9.84	
6140.00	29.400	290.810	6075.63	142.51	583.57	-121.01	5.23	
6235.00	34.790	286.500	6156.09	190.89	599.57	-168.84	6.16	
6330.00	44.240	275.960	6229.38	250.41	610.74	-227.99	12.17	
6424.00	53.150	274.130	6291.37	320.86	616.87	-298.26	9.59	
6519.00	61.150	277.400	6342.87	400.42	624.98	-377.57	8.90	
6613.00	70.290	278.500	6381.48	485.57	636.85	-462.33	9.78	
6708.00	78.950	275.910	6406.66	576.71	648.28	-553.12	9.49	
6802.00	86.460	272.550	6418.59	669.81	655.13	-646.03	8.74	
6897.00	84.450	264.030	6426.13	764.21	652.32	-740.59	9.19	
6991.00	85.750	260.300	6434.16	856.43	639.55	-833.36	4.19	
7086.00	85.630	264.890	6441.30	949.83	627.34	-927.27	4.82	
7181.00	86.520	271.430	6447.81	1044.33	624.31	-1021.95	6.93	
7370.00	91.850	274.880	6450.50	1233.18	634.70	-1210.54	3.36	
7465.00	91.850	275.290	6447.43	1328.01	643.12	-1305.12	0.43	
7559.00	91.880	272.450	6444.37	1421.90	649.46	-1398.85	3.02	
7654.00	93.170	266.670	6440.18	1516.68	648.73	-1493.71	6.23	
7748.00	93.730	261.380	6434.52	1609.54	638.97	-1587.00	5.65	
7843.00	89.690	260.640	6431.69	1702.70	624.14	-1680.77	4.32	
7937.00	89.660	265.190	6432.22	1795.46	612.55	-1774.02	4.84	
8031.00	88.860	267.280	6433.44	1888.95	606.37	-1867.81	2.38	
8126.00	88.980	267.650	6435.23	1983.62	602.17	-1962.70	0.41	
8220.00	88.920	267.430	6436.95	2077.30	598.14	-2056.59	0.24	
8315.00	89.020	267.320	6438.66	2171.96	593.79	-2151.48	0.16	



Actual Wellpath Report

WELLS RANCH AF07-666 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 AWB
Facility	SEC.08-T05N-R62W		

WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8409.00	89.540	266.960	6439.84	2265.60	589.10	-2245.35	0.67	
8504.00	89.720	267.000	6440.45	2360.22	584.09	-2340.22	0.19	
8598.00	89.690	265.700	6440.94	2453.74	578.11	-2434.03	1.38	
8693.00	89.660	264.730	6441.48	2548.05	570.19	-2528.69	1.02	
8787.00	89.540	265.240	6442.13	2641.32	561.97	-2622.33	0.56	
8881.00	89.600	265.720	6442.84	2734.68	554.56	-2716.04	0.51	
8976.00	89.600	267.100	6443.50	2829.21	548.61	-2810.84	1.45	
9070.00	89.750	268.380	6444.03	2922.93	544.91	-2904.77	1.37	
9165.00	89.780	269.760	6444.42	3017.79	543.36	-2999.75	1.45	
9259.00	89.940	270.190	6444.65	3111.73	543.32	-3093.75	0.49	
9354.00	89.940	270.760	6444.75	3206.69	544.11	-3188.75	0.60	
9448.00	89.750	270.810	6445.01	3300.66	545.40	-3282.74	0.21	
9543.00	89.880	269.640	6445.31	3395.61	545.77	-3377.74	1.24	
9637.00	89.600	269.480	6445.74	3489.51	545.05	-3471.73	0.34	
9731.00	89.750	270.410	6446.27	3583.44	544.96	-3565.73	1.00	
9826.00	90.000	270.510	6446.48	3678.40	545.72	-3660.73	0.28	
9920.00	89.780	270.970	6446.66	3772.37	546.94	-3754.72	0.54	
10015.00	89.850	269.990	6446.97	3867.33	547.73	-3849.71	1.03	
10110.00	89.720	269.120	6447.32	3962.24	546.99	-3944.71	0.93	
10204.00	89.910	270.130	6447.63	4056.14	546.38	-4038.70	1.09	
10393.00	89.750	269.610	6448.19	4245.00	545.95	-4227.70	0.29	
10488.00	89.750	270.340	6448.60	4339.93	545.91	-4322.70	0.77	
10583.00	89.850	270.080	6448.94	4434.88	546.26	-4417.70	0.29	
10677.00	89.690	270.760	6449.31	4528.83	546.95	-4511.70	0.74	
10772.00	89.850	272.670	6449.69	4623.83	549.79	-4606.65	2.02	
10866.00	89.750	272.290	6450.02	4717.82	553.86	-4700.56	0.42	
10961.00	90.000	269.630	6450.23	4812.79	555.45	-4795.54	2.81	
11055.00	89.910	266.630	6450.30	4906.56	552.38	-4889.48	3.19	
11150.00	89.820	266.500	6450.53	5001.11	546.69	-4984.30	0.17	
11244.00	89.820	266.170	6450.82	5094.63	540.68	-5078.11	0.35	



Actual Wellpath Report

WELLS RANCH AF07-666 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 AWP
Facility	SEC.08-T05N-R62W		

WELLPATH DATA (177 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11339.00	89.660	266.040	6451.25	5189.11	534.23	-5172.89	0.22	
11434.00	89.690	266.290	6451.79	5283.59	527.87	-5267.68	0.27	
11528.00	89.780	266.840	6452.23	5377.15	522.24	-5361.51	0.59	
11623.00	89.750	267.740	6452.62	5471.81	517.75	-5456.40	0.95	
11717.00	89.720	266.540	6453.05	5565.45	513.06	-5550.28	1.28	
11811.00	89.750	263.250	6453.49	5658.69	504.70	-5643.89	3.50	
11906.00	89.660	265.170	6453.98	5752.78	495.11	-5738.40	2.02	
12001.00	89.780	265.770	6454.44	5847.14	487.61	-5833.10	0.64	
12095.00	89.820	268.390	6454.77	5940.77	482.82	-5926.97	2.79	
12190.00	89.690	268.510	6455.17	6035.58	480.25	-6021.94	0.19	
12284.00	89.820	268.320	6455.58	6129.38	477.65	-6115.90	0.24	
12379.00	89.780	269.620	6455.91	6224.23	475.94	-6210.88	1.37	
12473.00	89.780	269.870	6456.27	6318.15	475.53	-6304.88	0.27	
12568.00	89.720	271.990	6456.68	6413.13	477.07	-6399.86	2.23	
12662.00	89.780	270.920	6457.09	6507.12	479.46	-6493.83	1.14	
12757.00	89.940	271.290	6457.33	6602.10	481.29	-6588.81	0.42	
12851.00	89.750	270.600	6457.58	6696.08	482.84	-6682.80	0.76	
12946.00	89.820	268.970	6457.94	6791.00	482.48	-6777.79	1.72	
13041.00	89.780	269.780	6458.27	6885.89	481.44	-6872.79	0.85	
13135.00	89.820	271.820	6458.60	6979.86	482.76	-6966.77	2.17	
13230.00	89.780	272.380	6458.93	7074.86	486.24	-7061.71	0.59	
13324.00	89.910	271.790	6459.18	7168.86	489.66	-7155.64	0.64	
13419.00	89.880	272.610	6459.36	7263.85	493.30	-7250.57	0.86	
13513.00	89.750	271.110	6459.66	7357.85	496.36	-7344.52	1.60	
13608.00	89.780	269.490	6460.05	7452.80	496.85	-7439.51	1.71	
13702.00	90.430	267.460	6459.88	7546.60	494.35	-7533.48	2.27	
13797.00	89.690	264.430	6459.78	7641.04	487.63	-7628.23	3.28	
13891.00	89.750	264.490	6460.24	7734.20	478.56	-7721.79	0.09	
13986.00	89.660	265.580	6460.73	7828.47	470.34	-7816.43	1.15	
14080.00	89.880	266.670	6461.10	7921.96	463.99	-7910.21	1.18	



Actual Wellpath Report

WELLS RANCH AF07-666 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 AWP
Facility	SEC.08-T05N-R62W		

WELLPATH DATA (177 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
14175.00	89.820	267.590	6461.35	8016.59	459.23	-8005.09	0.97	
14269.00	89.820	267.610	6461.65	8110.30	455.29	-8099.01	0.02	
14364.00	89.820	268.010	6461.95	8205.03	451.66	-8193.94	0.42	
14458.00	89.780	270.280	6462.27	8298.90	450.26	-8287.92	2.42	
14553.00	89.780	271.590	6462.64	8393.88	451.81	-8382.90	1.38	
14648.00	89.970	269.210	6462.85	8488.83	452.47	-8477.89	2.51	
14742.00	89.850	267.420	6462.99	8582.62	449.71	-8571.85	1.91	
14837.00	89.850	266.620	6463.24	8677.24	444.77	-8666.72	0.84	
14931.00	89.780	267.180	6463.55	8770.85	439.69	-8760.58	0.60	
15026.00	89.820	267.380	6463.88	8865.51	435.18	-8855.47	0.21	
15120.00	89.720	267.550	6464.25	8959.20	431.02	-8949.38	0.21	
15215.00	89.820	267.060	6464.64	9053.86	426.55	-9044.27	0.53	
15309.00	89.820	267.700	6464.93	9147.54	422.26	-9138.18	0.68	
15404.00	89.720	267.710	6465.31	9242.26	418.45	-9233.10	0.11	
15498.00	89.850	268.000	6465.67	9336.00	414.94	-9327.03	0.34	
15592.00	89.750	267.800	6465.99	9429.74	411.49	-9420.97	0.24	
15687.00	89.880	267.550	6466.30	9524.45	407.64	-9515.89	0.30	
15781.00	89.780	267.700	6466.58	9618.17	403.74	-9609.81	0.19	
15876.00	89.820	265.740	6466.91	9712.74	398.31	-9704.65	2.06	
15970.00	89.940	264.640	6467.11	9806.05	390.42	-9798.31	1.18	
16065.00	89.720	265.430	6467.39	9900.32	382.20	-9892.96	0.86	
16159.00	89.820	265.930	6467.77	9993.73	375.12	-9986.69	0.54	
16254.00	89.720	266.100	6468.15	10088.19	368.52	-10081.46	0.21	
16348.00	89.780	266.090	6468.56	10181.67	362.12	-10175.24	0.06	
16443.00	89.690	267.860	6469.00	10276.28	357.11	-10270.10	1.87	
16516.00	89.820	268.940	6469.31	10349.13	355.07	-10343.07	1.49	LAST BHGE MWD SURVEY (1644' FNL & 28' FWL, SEC. 07)
16540.00	89.820	268.940	6469.39	10373.09	354.62	-10367.07	0.00	PROJECTION TO BIT (1645' FNL & 4' FWL, SEC. 07)



Actual Wellpath Report

WELLS RANCH AF07-666 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 AWB
Facility	SEC.08-T05N-R62W		

HOLE & CASING SECTIONS - Ref Wellbore: WELLS RANCH AF07-666 AWB Ref Wellpath: WELLS RANCH AF07-666 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	1935.00	1905.00	30.00	1934.92	0.00	0.00	2.70	-10.70
8.5in Open Hole	30.00	16540.00	16510.00	30.00	6469.39	0.00	0.00	354.62	-10367.07

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	-1868.55	41.19	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
SEC.08-T05N-R62W	-9.00	-1868.55	41.19	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
WELLS RANCH AF07-666 LANDING POINT REV-2	6437.00	635.00	-730.00	3322716.68	1396876.79	40°25'01.341"N	104°20'27.426"W	point
WELLS RANCH AF07-666 BHL REV-2 (1615'FNL & 1'FWL, SEC.07)	6470.66	383.69	-10369.94	3313077.13	1396625.49	40°25'00.084"N	104°22'32.088"W	point
SEC.07-T05N-R62W 460' SETBACKS	6528.00	-1868.55	41.19	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
SEC.08-T05N-R62W 460'SETBACKS	6528.00	-1868.55	41.19	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: WELLS RANCH AF07-666 AWB Ref Wellpath: WELLS RANCH AF07-666 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1931.00	Gyrodatta standard - Continuous gyro	MesaWest Surface Surveys <81'-1931'>	WELLS RANCH AF07-666 AWB
1931.00	16516.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	BHI/ATC OWSG MWD rev2+IFR1+MSA 8.5" Hole <1981'-16516'>	WELLS RANCH AF07-666 AWB
16516.00	16540.00	Blind Drilling (std)	Projection to bit	WELLS RANCH AF07-666 AWB

**Actual Wellpath Report**

WELLS RANCH AF07-666 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#10 WELLS RANCH AF07-666 (2275'FNL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-666
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-666 AWB
Facility	SEC.08-T05N-R62W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1931.00	0.870	226.290	1930.92	TIED TO GYRO SURVEYS
16516.00	89.820	268.940	6469.31	LAST BHGE MWD SURVEY (1644' FNL & 28' FWL, SEC. 07)
16540.00	89.820	268.940	6469.39	PROJECTION TO BIT (1645' FNL & 4' FWL, SEC. 07)

COMMENTS	
Wellpath general comments SURFACE LOCATION: SENE 40.41527N 104.33836W API #: 05-123-44240	