

Location:	COLORADO	Slot:	SLOT#04 WELLS RANCH AF07-625 (1237'FSL & 175'FEL, SEC.08)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	WELLS RANCH AF07-625
Facility:	SEC.08-T05N-R62W	Wellbore:	WELLS RANCH AF07-625 PWB

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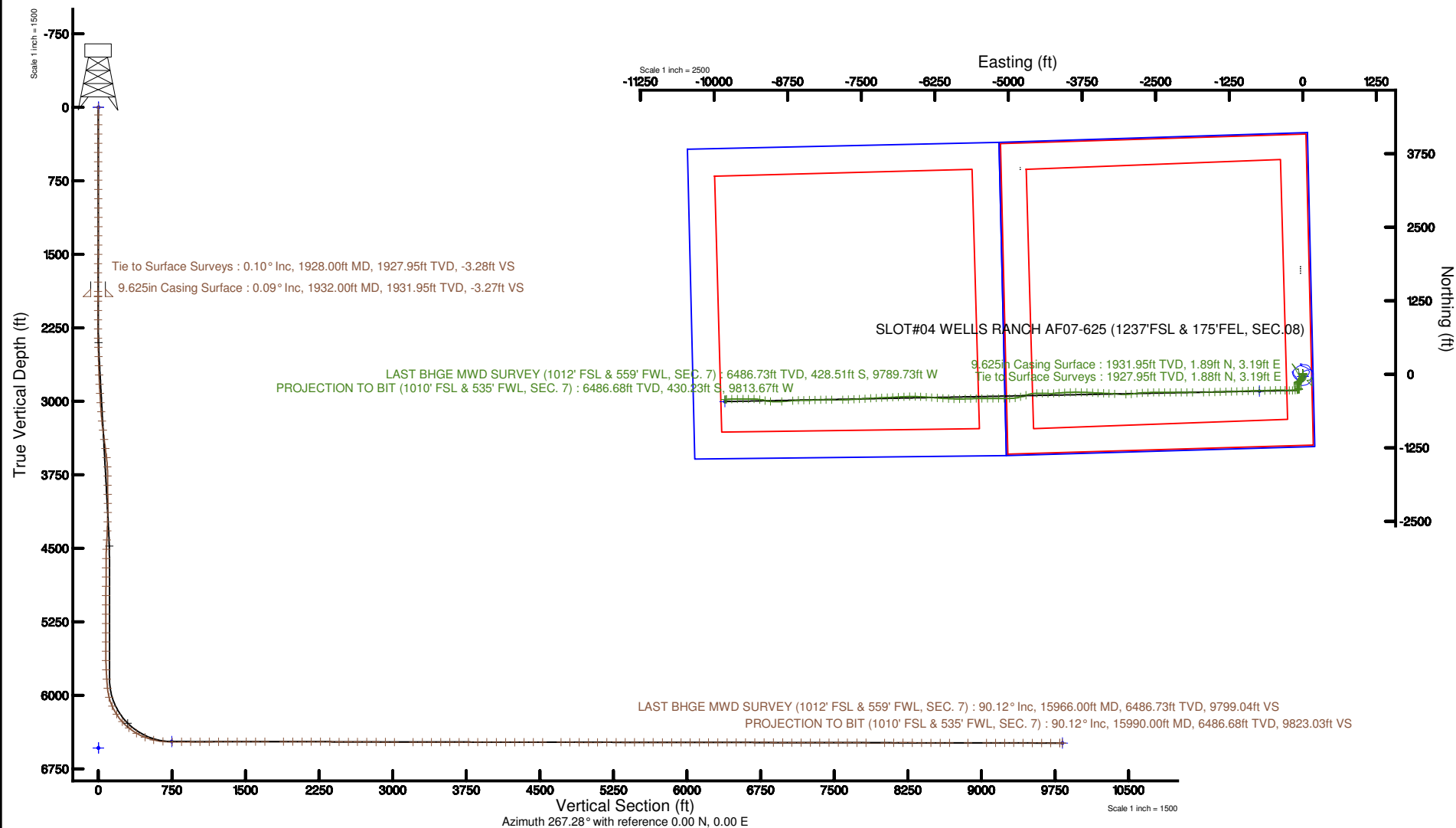


BGGM (1900.0 to 2018.0) Dip: 66.96° Field: 52513.1 nT  
Magnetic North is 8.15 degrees East of True North (at 6/6/2017)  
Grid North is 0.75 degrees East of True North  
To correct azimuth from True to Grid subtract 0.75 degrees  
To correct azimuth from Magnetic to Grid add 7.40 degrees



<p> <a href="#">P&amp;G literature reference in WELLS RANCH AFO</a> and <a href="#">P&amp;G A-6 P&amp;WP</a>  <a href="#">P&amp;G wellhead equipment was referenced in</a> <a href="#">P&amp;G 120140</a>, <a href="#">P&amp;WS</a>  <a href="#">and</a> <a href="#">P&amp;G 120140</a>, <a href="#">P&amp;WS</a>  <a href="#">P&amp;G 120140</a>, <a href="#">P&amp;WS</a> in <a href="#">Mason Steel Plant</a> 4744 Steel  <a href="#">Mason Steel Plant to Mulliken (U) Steel</a> <a href="#">SOUTHERN WELLS RANCH AFO</a> 6201 <a href="#">E201F</a> &amp; <a href="#">V201F</a>, <a href="#">SEC 08</a>; 3 line  <a href="#">Coordinates were to head reference and to Star</a> </p>	<p> <a href="#">Grid System NAD83</a> <a href="#">Cartesian Coordinates SP</a>, <a href="#">Northern Zone</a> (2011), <a href="#">US</a> feet  <a href="#">North American</a> <a href="#">Geoid</a>  <a href="#">North</a> <a href="#">Reference</a>  <a href="#">Datum</a> <a href="#">is</a> <a href="#">true</a>  <a href="#">Created by</a> <a href="#">category</a> <a href="#">on</a> <a href="#">2017-08-09</a>  <a href="#">Disclaimer</a> <a href="#">Planned</a> </p>
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### Location Information

[illegible]



# Actual Wellpath Report

WELLS RANCH AF07-625 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 WELLS RANCH AF07-625 (1237'FSL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-625
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-625 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	8/29/2017 at 3:49:46 PM
Convergence at slot	0.75° East	Database/Source file	Denver/WELLS_RANCH_AF07-625_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-3482.65	4799.00	3323487.31	1394413.42	40°24'36.900"N	104°20'17.880"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	4744.00ft
Horizontal Reference Pt	Slot	RIG (30'KB) (RKB) to Mean Sea Level	4744.00ft
Vertical Reference Pt	RIG (30'KB) (RKB)	RIG (30'KB) (RKB) to Mud Line at Slot (SLOT#04 WELLS RANCH AF07-625 (1237'FSL & 175'FEL, SEC.08))	4744.00ft
MD Reference Pt	RIG (30'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	267.28°



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-625 AWB
Facility	SEC.08-T05N-R62W		

## WELLPATH DATA (145 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
1928.00	0.100	333.110	1927.95	-3.28	1.88	3.19	40°24'36.918"N	104°20'17.838"W	0.36	Tie to Surface Surveys
1978.00	0.100	250.580	1977.95	-3.22	1.91	3.13	40°24'36.918"N	104°20'17.839"W	0.26	
2073.00	0.090	66.770	2072.95	-3.21	1.91	3.12	40°24'36.918"N	104°20'17.839"W	0.20	
2168.00	0.070	114.860	2167.95	-3.33	1.91	3.24	40°24'36.918"N	104°20'17.838"W	0.07	
2262.00	2.910	176.710	2261.91	-3.40	-0.49	3.43	40°24'36.895"N	104°20'17.836"W	3.06	
2357.00	6.370	186.830	2356.59	-2.55	-8.14	2.94	40°24'36.819"N	104°20'17.843"W	3.73	
2451.00	7.370	190.540	2449.91	-0.31	-19.24	1.22	40°24'36.710"N	104°20'17.868"W	1.16	
2546.00	7.410	189.830	2544.12	2.42	-31.27	-0.94	40°24'36.591"N	104°20'17.897"W	0.10	
2640.00	7.420	189.510	2637.34	5.02	-43.23	-2.98	40°24'36.473"N	104°20'17.926"W	0.05	
2735.00	7.410	194.300	2731.54	8.12	-55.21	-5.51	40°24'36.355"N	104°20'17.961"W	0.65	
2830.00	7.410	197.570	2825.75	12.03	-66.99	-8.87	40°24'36.239"N	104°20'18.006"W	0.44	
2924.00	7.380	201.440	2918.97	16.60	-78.39	-12.91	40°24'36.127"N	104°20'18.060"W	0.53	
3019.00	7.240	209.340	3013.20	22.28	-89.29	-18.07	40°24'36.020"N	104°20'18.129"W	1.07	
3113.00	7.250	217.800	3106.45	29.28	-99.14	-24.61	40°24'35.924"N	104°20'18.215"W	1.13	
3208.00	7.060	226.710	3200.71	37.60	-107.88	-32.53	40°24'35.838"N	104°20'18.319"W	1.18	
3302.00	7.540	237.530	3293.96	47.35	-115.15	-41.94	40°24'35.768"N	104°20'18.442"W	1.55	
3397.00	7.670	255.600	3388.13	58.97	-120.07	-53.34	40°24'35.720"N	104°20'18.590"W	2.51	
3491.00	8.200	251.360	3481.23	71.56	-123.77	-65.77	40°24'35.686"N	104°20'18.751"W	0.84	
3586.00	8.250	230.930	3575.28	83.56	-130.24	-77.48	40°24'35.623"N	104°20'18.904"W	3.06	
3680.00	8.980	199.520	3668.27	91.78	-141.41	-85.17	40°24'35.514"N	104°20'19.005"W	5.00	
3775.00	8.990	173.630	3762.14	94.11	-155.78	-86.83	40°24'35.372"N	104°20'19.029"W	4.22	
3870.00	8.910	181.570	3855.99	94.19	-170.51	-86.21	40°24'35.226"N	104°20'19.023"W	1.30	
3964.00	9.000	184.840	3948.84	95.70	-185.11	-87.03	40°24'35.082"N	104°20'19.036"W	0.55	
4059.00	9.020	178.020	4042.67	96.77	-199.96	-87.40	40°24'34.936"N	104°20'19.044"W	1.12	
4153.00	8.990	173.430	4135.51	96.37	-214.62	-86.30	40°24'34.791"N	104°20'19.032"W	0.76	
4248.00	8.970	168.370	4229.35	94.72	-229.25	-83.96	40°24'34.646"N	104°20'19.004"W	0.83	
4342.00	7.960	159.390	4322.33	91.59	-242.52	-80.19	40°24'34.514"N	104°20'18.958"W	1.77	
4436.00	5.550	137.170	4415.69	86.66	-251.95	-74.81	40°24'34.420"N	104°20'18.890"W	3.74	
4531.00	2.660	95.910	4510.45	81.52	-255.55	-69.49	40°24'34.384"N	104°20'18.821"W	4.17	
4625.00	1.060	29.650	4604.41	78.89	-255.02	-66.89	40°24'34.389"N	104°20'18.788"W	2.59	



# Actual Wellpath Report

WELLS RANCH AF07-625 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 WELLS RANCH AF07-625 (1237'FSL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-625
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-625 AWB
Facility	SEC.08-T05N-R62W		

## WELLPATH DATA (145 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4720.00	0.030	312.280	4699.40	78.44	-254.23	-66.47	40°24'34.397"N	104°20'18.782"W	1.11	
4814.00	0.040	147.990	4793.40	78.44	-254.25	-66.47	40°24'34.396"N	104°20'18.782"W	0.07	
4909.00	0.110	93.430	4888.40	78.34	-254.28	-66.36	40°24'34.396"N	104°20'18.781"W	0.10	
5003.00	0.130	66.580	4982.40	78.15	-254.24	-66.18	40°24'34.396"N	104°20'18.778"W	0.06	
5098.00	0.120	67.140	5077.40	77.95	-254.16	-65.99	40°24'34.397"N	104°20'18.776"W	0.01	
5193.00	0.110	116.220	5172.40	77.78	-254.16	-65.81	40°24'34.397"N	104°20'18.774"W	0.10	
5287.00	0.110	91.540	5266.40	77.61	-254.21	-65.64	40°24'34.397"N	104°20'18.772"W	0.05	
5382.00	0.070	337.040	5361.40	77.54	-254.15	-65.57	40°24'34.397"N	104°20'18.771"W	0.16	
5476.00	0.110	11.680	5455.40	77.54	-254.01	-65.58	40°24'34.399"N	104°20'18.771"W	0.07	
5571.00	0.040	169.610	5550.40	77.51	-253.96	-65.55	40°24'34.399"N	104°20'18.770"W	0.16	
5666.00	0.870	230.930	5645.40	78.09	-254.44	-66.11	40°24'34.394"N	104°20'18.778"W	0.90	
5760.00	3.230	229.660	5739.33	80.76	-256.61	-68.68	40°24'34.373"N	104°20'18.811"W	2.51	
5855.00	4.380	234.700	5834.12	85.94	-260.44	-73.68	40°24'34.336"N	104°20'18.876"W	1.26	
5950.00	6.580	253.390	5928.68	94.28	-264.09	-81.86	40°24'34.301"N	104°20'18.983"W	2.95	
6044.00	13.790	257.310	6021.14	110.56	-268.10	-97.97	40°24'34.264"N	104°20'19.192"W	7.70	
6139.00	24.150	264.730	6110.87	141.21	-272.38	-128.45	40°24'34.225"N	104°20'19.587"W	11.18	
6233.00	32.980	267.410	6193.35	186.10	-275.31	-173.25	40°24'34.202"N	104°20'20.166"W	9.49	
6328.00	41.650	270.970	6268.85	243.57	-275.94	-230.76	40°24'34.203"N	104°20'20.910"W	9.40	
6422.00	51.220	272.520	6333.55	311.39	-273.80	-298.75	40°24'34.233"N	104°20'21.788"W	10.25	
6517.00	60.490	270.710	6386.82	389.70	-271.65	-377.26	40°24'34.265"N	104°20'22.802"W	9.88	
6612.00	68.910	268.430	6427.39	475.44	-272.36	-463.06	40°24'34.269"N	104°20'23.912"W	9.12	
6706.00	76.130	267.820	6455.61	565.03	-275.30	-552.61	40°24'34.251"N	104°20'25.070"W	7.71	
6801.00	84.970	267.710	6471.19	658.65	-278.95	-646.16	40°24'34.227"N	104°20'26.280"W	9.31	
6895.00	90.520	269.380	6474.89	752.51	-281.33	-740.01	40°24'34.216"N	104°20'27.493"W	6.17	
6990.00	90.090	269.640	6474.38	847.44	-282.14	-835.01	40°24'34.220"N	104°20'28.721"W	0.53	
7084.00	89.910	267.990	6474.38	941.40	-284.09	-928.98	40°24'34.213"N	104°20'29.936"W	1.77	
7179.00	90.150	267.280	6474.33	1036.40	-288.01	-1023.90	40°24'34.187"N	104°20'31.164"W	0.79	
7273.00	90.030	268.110	6474.18	1130.39	-291.79	-1117.83	40°24'34.161"N	104°20'32.379"W	0.89	
7368.00	90.180	268.250	6474.01	1225.38	-294.81	-1212.78	40°24'34.144"N	104°20'33.606"W	0.22	
7462.00	90.090	268.590	6473.79	1319.36	-297.40	-1306.74	40°24'34.130"N	104°20'34.821"W	0.37	



# Actual Wellpath Report

WELLS RANCH AF07-625 AWP

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Operator	NOBLE ENERGY, INC	Slot	SLOT#04 WELLS RANCH AF07-625 (1237'FSL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-625
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-625 AWB
Facility	SEC.08-T05N-R62W		

## WELLPATH DATA (145 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7557.00	90.180	268.000	6473.56	1414.35	-300.22	-1401.70	40°24'34.115"N	104°20'36.049"W	0.63	
7651.00	90.310	268.390	6473.16	1508.34	-303.18	-1495.65	40°24'34.097"N	104°20'37.264"W	0.44	
7746.00	90.090	268.930	6472.83	1603.31	-305.41	-1590.62	40°24'34.088"N	104°20'38.492"W	0.61	
7841.00	90.090	268.920	6472.68	1698.27	-307.19	-1685.61	40°24'34.082"N	104°20'39.720"W	0.01	
8030.00	90.030	269.610	6472.48	1887.15	-309.61	-1874.59	40°24'34.083"N	104°20'42.164"W	0.37	
8124.00	90.060	269.680	6472.41	1981.07	-310.20	-1968.59	40°24'34.089"N	104°20'43.379"W	0.08	
8219.00	89.690	269.820	6472.62	2075.99	-310.61	-2063.59	40°24'34.097"N	104°20'44.607"W	0.42	
8313.00	89.660	270.660	6473.15	2169.86	-310.22	-2157.58	40°24'34.113"N	104°20'45.822"W	0.89	
8408.00	89.690	269.850	6473.69	2264.73	-309.79	-2252.58	40°24'34.130"N	104°20'47.049"W	0.85	
8502.00	89.780	270.400	6474.12	2358.61	-309.59	-2346.58	40°24'34.144"N	104°20'48.264"W	0.59	
8597.00	89.750	269.910	6474.51	2453.49	-309.33	-2441.58	40°24'34.158"N	104°20'49.492"W	0.52	
8691.00	89.720	269.110	6474.95	2547.42	-310.14	-2535.57	40°24'34.163"N	104°20'50.708"W	0.85	
8785.00	89.750	268.700	6475.38	2641.38	-311.93	-2629.55	40°24'34.157"N	104°20'51.923"W	0.44	
8880.00	89.630	266.040	6475.90	2736.37	-316.29	-2724.44	40°24'34.126"N	104°20'53.150"W	2.80	
8974.00	89.690	261.650	6476.45	2830.18	-326.37	-2817.88	40°24'34.038"N	104°20'54.359"W	4.67	
9069.00	89.750	264.530	6476.92	2924.91	-337.79	-2912.18	40°24'33.938"N	104°20'55.580"W	3.03	
9163.00	89.780	270.150	6477.30	3018.87	-342.16	-3006.04	40°24'33.907"N	104°20'56.794"W	5.98	
9352.00	89.850	275.000	6477.91	3207.01	-333.67	-3194.79	40°24'34.015"N	104°20'59.233"W	2.57	
9447.00	90.150	272.110	6477.91	3301.43	-327.78	-3289.60	40°24'34.085"N	104°21'00.457"W	3.06	
9541.00	89.850	272.420	6477.91	3395.08	-324.06	-3383.52	40°24'34.134"N	104°21'01.671"W	0.46	
9636.00	89.880	273.380	6478.14	3489.62	-319.26	-3478.40	40°24'34.193"N	104°21'02.896"W	1.01	
9730.00	89.940	272.730	6478.29	3583.14	-314.25	-3572.27	40°24'34.255"N	104°21'04.109"W	0.69	
9825.00	90.000	271.990	6478.34	3677.77	-310.33	-3667.18	40°24'34.306"N	104°21'05.335"W	0.78	
9919.00	89.880	271.220	6478.43	3771.50	-307.70	-3761.15	40°24'34.344"N	104°21'06.549"W	0.83	
10014.00	89.940	269.910	6478.58	3866.34	-306.76	-3856.14	40°24'34.365"N	104°21'07.777"W	1.38	
10108.00	90.150	268.400	6478.51	3960.29	-308.15	-3950.13	40°24'34.363"N	104°21'08.992"W	1.62	
10203.00	89.850	266.770	6478.51	4055.29	-312.15	-4045.04	40°24'34.336"N	104°21'10.219"W	1.74	
10298.00	89.720	264.670	6478.87	4150.24	-319.24	-4139.77	40°24'34.278"N	104°21'11.445"W	2.21	
10392.00	90.310	266.240	6478.84	4244.19	-326.69	-4233.47	40°24'34.216"N	104°21'12.657"W	1.78	
10487.00	90.650	272.490	6478.04	4339.08	-327.74	-4328.41	40°24'34.218"N	104°21'13.885"W	6.59	



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-625 AWB
Facility	SEC.08-T05N-R62W		

## WELLPATH DATA (145 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10582.00	89.820	270.750	6477.66	4433.80	-325.06	-4423.37	40°24'34.257"N	104°21'15.112"W	2.03	
10676.00	89.850	269.360	6477.93	4527.69	-324.97	-4517.37	40°24'34.270"N	104°21'16.327"W	1.48	
10865.00	89.750	251.060	6478.59	4714.45	-356.97	-4702.82	40°24'33.977"N	104°21'18.729"W	9.68	
10959.00	89.820	254.240	6478.94	4805.39	-385.00	-4792.53	40°24'33.712"N	104°21'19.894"W	3.38	
11054.00	89.880	262.370	6479.19	4899.15	-404.24	-4885.48	40°24'33.533"N	104°21'21.098"W	8.56	
11149.00	89.320	267.950	6479.86	4994.04	-412.25	-4980.10	40°24'33.466"N	104°21'22.323"W	5.90	
11243.00	90.800	271.250	6479.76	5087.95	-412.90	-5074.09	40°24'33.472"N	104°21'23.538"W	3.85	
11337.00	90.220	270.270	6478.92	5181.77	-411.66	-5168.07	40°24'33.496"N	104°21'24.752"W	1.21	
11432.00	89.720	269.740	6478.97	5276.66	-411.65	-5263.07	40°24'33.508"N	104°21'25.980"W	0.77	
11526.00	90.030	269.020	6479.18	5370.60	-412.67	-5357.07	40°24'33.510"N	104°21'27.196"W	0.83	
11621.00	90.000	269.750	6479.15	5465.54	-413.69	-5452.06	40°24'33.512"N	104°21'28.424"W	0.77	
11715.00	89.850	269.310	6479.27	5559.46	-414.46	-5546.06	40°24'33.517"N	104°21'29.639"W	0.49	
11810.00	89.880	268.820	6479.50	5654.42	-416.01	-5641.04	40°24'33.513"N	104°21'30.867"W	0.52	
11904.00	89.850	267.530	6479.72	5748.40	-419.00	-5734.99	40°24'33.496"N	104°21'32.082"W	1.37	
11999.00	89.940	270.020	6479.89	5843.36	-421.03	-5829.96	40°24'33.488"N	104°21'33.310"W	2.62	
12094.00	89.850	272.060	6480.07	5938.15	-419.31	-5924.94	40°24'33.517"N	104°21'34.537"W	2.15	
12188.00	89.910	272.770	6480.27	6031.78	-415.35	-6018.86	40°24'33.568"N	104°21'35.750"W	0.76	
12282.00	89.910	273.910	6480.41	6125.25	-409.87	-6112.70	40°24'33.634"N	104°21'36.962"W	1.21	
12377.00	89.940	274.380	6480.54	6219.57	-403.00	-6207.45	40°24'33.714"N	104°21'38.186"W	0.50	
12472.00	89.940	274.460	6480.64	6313.83	-395.68	-6302.17	40°24'33.798"N	104°21'39.409"W	0.08	
12566.00	90.030	273.240	6480.66	6407.22	-389.37	-6395.95	40°24'33.872"N	104°21'40.620"W	1.30	
12661.00	89.940	272.610	6480.69	6501.76	-384.52	-6490.83	40°24'33.932"N	104°21'41.846"W	0.67	
12755.00	89.850	271.910	6480.86	6595.40	-380.82	-6584.75	40°24'33.981"N	104°21'43.059"W	0.75	
12850.00	89.850	268.580	6481.11	6690.26	-380.41	-6679.74	40°24'33.997"N	104°21'44.287"W	3.51	
12945.00	89.820	268.180	6481.38	6785.24	-383.10	-6774.70	40°24'33.983"N	104°21'45.515"W	0.42	
13039.00	89.850	266.560	6481.65	6879.24	-387.41	-6868.60	40°24'33.952"N	104°21'46.730"W	1.72	
13134.00	89.820	266.620	6481.92	6974.23	-393.06	-6963.43	40°24'33.908"N	104°21'47.956"W	0.07	
13228.00	89.780	268.270	6482.25	7068.23	-397.25	-7057.33	40°24'33.878"N	104°21'49.171"W	1.76	
13323.00	89.910	267.760	6482.51	7163.22	-400.54	-7152.27	40°24'33.858"N	104°21'50.399"W	0.55	
13417.00	89.850	266.630	6482.71	7257.22	-405.14	-7246.16	40°24'33.824"N	104°21'51.613"W	1.20	



# Actual Wellpath Report

WELLS RANCH AF07-625 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 WELLS RANCH AF07-625 (1237'FSL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-625
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-625 AWP
Facility	SEC.08-T05N-R62W		

WELLPATH DATA (145 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS °/100ft	Comments
13512.00	89.940	266.780	6482.88	7352.21	-410.60	-7341.00	40°24'33.782"N	104°21'52.840"W	0.18	
13606.00	89.750	266.440	6483.14	7446.21	-416.16	-7434.84	40°24'33.739"N	104°21'54.054"W	0.41	
13701.00	89.880	266.400	6483.44	7541.19	-422.09	-7529.65	40°24'33.693"N	104°21'55.280"W	0.14	
13795.00	89.820	267.300	6483.69	7635.19	-427.26	-7623.51	40°24'33.654"N	104°21'56.494"W	0.96	
13890.00	89.850	267.560	6483.96	7730.19	-431.52	-7718.41	40°24'33.624"N	104°21'57.722"W	0.28	
13984.00	89.880	268.690	6484.18	7824.18	-434.59	-7812.36	40°24'33.605"N	104°21'58.937"W	1.20	
14173.00	89.780	270.740	6484.74	8013.00	-435.53	-8001.35	40°24'33.620"N	104°22'01.380"W	1.09	
14267.00	90.620	271.510	6484.42	8106.78	-433.69	-8095.33	40°24'33.650"N	104°22'02.594"W	1.21	
14362.00	90.030	267.020	6483.88	8201.70	-434.90	-8190.29	40°24'33.650"N	104°22'03.822"W	4.77	
14457.00	89.690	268.330	6484.11	8296.70	-438.76	-8285.21	40°24'33.624"N	104°22'05.049"W	1.42	
14551.00	89.540	269.420	6484.74	8390.66	-440.60	-8379.19	40°24'33.617"N	104°22'06.264"W	1.17	
14646.00	90.180	269.750	6484.97	8485.58	-441.29	-8474.19	40°24'33.622"N	104°22'07.492"W	0.76	
14740.00	90.120	267.490	6484.73	8579.55	-443.56	-8568.15	40°24'33.612"N	104°22'08.707"W	2.41	
14835.00	90.060	265.380	6484.58	8674.53	-449.46	-8662.96	40°24'33.565"N	104°22'09.934"W	2.22	
15024.00	89.910	265.440	6484.63	8863.43	-464.59	-8851.36	40°24'33.440"N	104°22'12.372"W	0.09	
15213.00	89.750	275.590	6485.19	9051.88	-462.89	-9040.10	40°24'33.480"N	104°22'14.811"W	5.37	
15308.00	89.940	281.760	6485.45	9144.96	-448.57	-9133.97	40°24'33.633"N	104°22'16.022"W	6.50	
15402.00	89.820	278.720	6485.64	9236.56	-431.86	-9226.46	40°24'33.810"N	104°22'17.215"W	3.24	
15496.00	89.880	272.830	6485.89	9329.49	-422.41	-9319.94	40°24'33.915"N	104°22'18.422"W	6.27	
15591.00	89.850	269.440	6486.11	9424.26	-420.52	-9414.91	40°24'33.946"N	104°22'19.649"W	3.57	
15685.00	89.850	270.250	6486.36	9518.17	-420.78	-9508.91	40°24'33.955"N	104°22'20.864"W	0.86	
15780.00	89.940	269.420	6486.53	9613.07	-421.05	-9603.91	40°24'33.964"N	104°22'22.092"W	0.88	
15874.00	89.850	267.730	6486.71	9707.04	-423.39	-9697.87	40°24'33.953"N	104°22'23.307"W	1.80	
15966.00	90.120	265.890	6486.73	9799.04	-428.51	-9789.73	40°24'33.914"N	104°22'24.495"W	2.02	LAST BHGE MWD SURVEY (1012' FSL & 559' FWL, SEC. 7)
15990.00	90.120	265.890	6486.68	9823.03	-430.23	-9813.67	40°24'33.900"N	104°22'24.805"W	0.00	PROJECTION TO BIT (1010' FSL & 535' FWL, SEC. 7)



# Actual Wellpath Report

WELLS RANCH AF07-625 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 WELLS RANCH AF07-625 (1237'FSL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-625
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-625 AWB
Facility	SEC.08-T05N-R62W		

HOLE & CASING SECTIONS - Ref Wellbore: WELLS RANCH AF07-625 AWB Ref Wellpath: WELLS RANCH AF07-625 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	1932.00	1902.00	30.00	1931.95	-0.01	0.00	1.89	3.19
8.5in Open Hole	30.00	15990.00	15960.00	30.00	6486.68	-0.01	0.00	-430.23	-9813.67

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.07-T05N-R62W	0.00	-40.07	0.52	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
SEC.08-T05N-R62W	0.00	-40.07	0.52	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
WELLS RANCH AF07-625 LANDING POINT	6471.31	-287.50	-736.50	3322750.84	1394125.93	40°24'34.155"N	104°20'27.449"W	point
WELLS RANCH AF07-625 BHL (975'FSL & 535'FWL, SEC.07)	6487.16	-465.47	-9814.07	3313673.64	1393947.97	40°24'33.552"N	104°22'24.816"W	point
SEC.07-T05N-R62W 460' SETBACKS	6537.00	-40.07	0.52	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon
SEC.08-T05N-R62W 460'SETBACKS	6537.00	-40.07	0.52	3323487.83	1394373.35	40°24'36.504"N	104°20'17.880"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: WELLS RANCH AF07-625 AWB Ref Wellpath: WELLS RANCH AF07-625 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1928.00	BHI Generic gyro - northseeking (Standard)	Surface Gyros <78'-1928'>	WELLS RANCH AF07-625 AWB
1928.00	15966.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	BHI/ATCurve 8.5" Hole OWSG+IFR+MSA <1978'-15966'>	WELLS RANCH AF07-625 AWB
15966.00	15990.00	Blind Drilling (std)	Projection to bit	WELLS RANCH AF07-625 AWB





## Actual Wellpath Report

WELLS RANCH AF07-625 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#04 WELLS RANCH AF07-625 (1237'FSL & 175'FEL, SEC.08)
Area	COLORADO	Well	WELLS RANCH AF07-625
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	WELLS RANCH AF07-625 AWB
Facility	SEC.08-T05N-R62W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1928.00	0.100	333.110	1927.95	Tie to Surface Surveys
15966.00	90.120	265.890	6486.73	LAST BHGE MWD SURVEY (1012' FSL & 559' FWL, SEC. 7)
15990.00	90.120	265.890	6486.68	PROJECTION TO BIT (1010' FSL & 535' FWL, SEC. 7)

COMMENTS	
<b>Wellpath general comments</b> SURFACE LOCATION: SESE 40.41025N 104.3383W API: 05-123-44238	