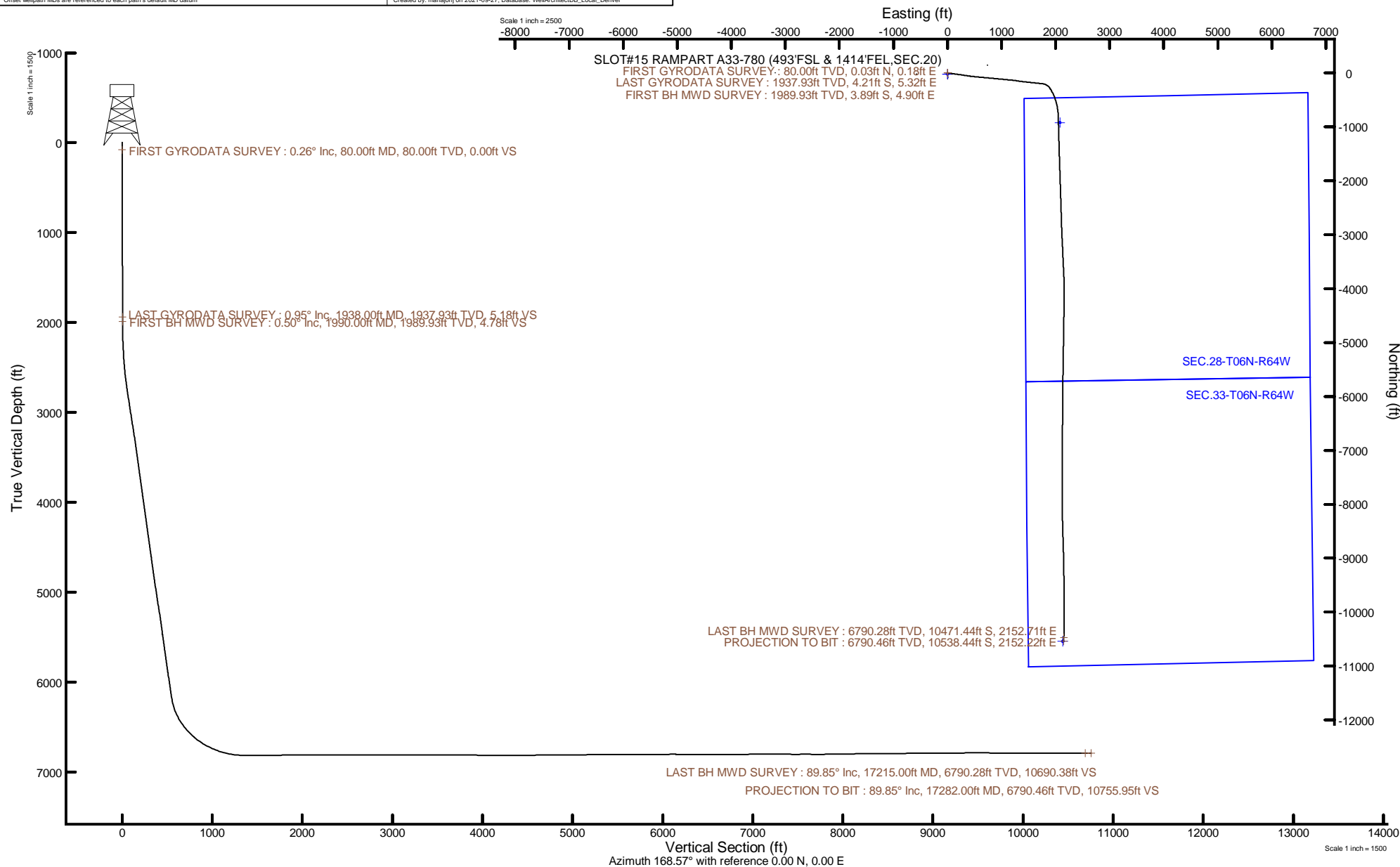


Location:	COLORADO	Slot:	SLOT#15 RAMPART A33-780 (493°FSL & 1414°FEL,SEC.20)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	RAMPART A33-780
Facility:	SEC.20-T06N-R64W	Wellbore:	RAMPART A33-780 PWB
Plot reference wellpath is RAMPART A33-780 PWP Rev-B.0		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501). US feet	
True vertical depths are referenced to H&P 517 (30') (RT)		North Reference: Grid north	
Reference wellpath measured depths are referenced to H&P 517 (30') (RT)		Scale: True distance	
H&P 517 (30') (RT) to Mean Sea Level: 4737 feet		Coordinates are in feet referenced to Slot	
Mean Sea Level to Ground level (At Slot: SLOT#15 RAMPART A33-780 (493°FSL & 1414°FEL,SEC.20)): 0 feet		Depths are in feet	
Offset wellpath MDs are referenced to each path's default MD datum		Created by: manojah on 2021-09-27; Database: WellArchitectDB_Local_Denver	





Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Manajohj
Scale	0.999964	Report Generated	9/27/2021 at 10:43:48 AM
Convergence at slot	0.60° East	Database	WellArchitectDB_Local_Denver

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-142.03	-737.87	3258845.59	1413807.66	40°27'56.0750"N	104°34'10.8840"W
Facility Reference Pt			3259583.43	1413949.68	40°27'57.4017"N	104°34'1.3187"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.3150"N	105°30'0.0000"W

WELLPATH DATUM

Calculation method	Minimum curvature	H&P 517 (30') (RT) to Facility Vertical Datum	4737.00ft
Horizontal Reference Pt	Slot	H&P 517 (30') (RT) to Mean Sea Level	4737.00ft
Vertical Reference Pt	H&P 517 (30') (RT)	H&P 517 (30') (RT) to Ground Level at Slot (SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20))	4737.00ft
MD Reference Pt	H&P 517 (30') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	168.57°



Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (184 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]
0.00	0.000	79.130	0.00	0.00	0.00	0.00	3258845.59	1413807.66	40°27'56.0750"N	104°34'10.8840"W	0.00
80.00	0.260	79.130	80.00	0.00	0.03	0.18	3258845.77	1413807.69	40°27'56.0753"N	104°34'10.8817"W	0.32
173.00	0.320	138.810	173.00	0.23	-0.12	0.56	3258846.15	1413807.54	40°27'56.0737"N	104°34'10.8768"W	0.32
264.00	0.790	104.350	263.99	0.72	-0.47	1.33	3258846.92	1413807.19	40°27'56.0702"N	104°34'10.8668"W	0.61
359.00	0.390	43.200	358.99	0.82	-0.39	2.19	3258847.78	1413807.27	40°27'56.0709"N	104°34'10.8558"W	0.73
453.00	0.290	90.760	452.99	0.69	-0.16	2.64	3258848.23	1413807.50	40°27'56.0731"N	104°34'10.8498"W	0.31
547.00	0.390	151.840	546.99	1.04	-0.45	3.03	3258848.62	1413807.21	40°27'56.0702"N	104°34'10.8448"W	0.38
642.00	0.300	109.950	641.99	1.48	-0.82	3.42	3258849.01	1413806.84	40°27'56.0665"N	104°34'10.8399"W	0.27
736.00	0.520	84.300	735.98	1.65	-0.86	4.08	3258849.67	1413806.80	40°27'56.0661"N	104°34'10.8314"W	0.30
831.00	0.400	84.410	830.98	1.73	-0.79	4.83	3258850.42	1413806.87	40°27'56.0667"N	104°34'10.8216"W	0.13
925.00	0.480	42.370	924.98	1.53	-0.46	5.43	3258851.02	1413807.20	40°27'56.0699"N	104°34'10.8139"W	0.35
1020.00	0.260	66.130	1019.98	1.25	-0.08	5.89	3258851.48	1413807.58	40°27'56.0736"N	104°34'10.8078"W	0.28
1114.00	0.450	103.650	1113.97	1.36	-0.08	6.45	3258852.03	1413807.58	40°27'56.0735"N	104°34'10.8006"W	0.31
1209.00	0.570	129.270	1208.97	1.88	-0.47	7.17	3258852.76	1413807.19	40°27'56.0696"N	104°34'10.7913"W	0.27
1303.00	0.520	136.860	1302.97	2.61	-1.08	7.83	3258853.42	1413806.58	40°27'56.0635"N	104°34'10.7829"W	0.09
1398.00	0.370	164.280	1397.96	3.28	-1.69	8.21	3258853.79	1413805.97	40°27'56.0575"N	104°34'10.7781"W	0.27
1493.00	0.350	145.720	1492.96	3.85	-2.22	8.45	3258854.04	1413805.44	40°27'56.0522"N	104°34'10.7750"W	0.12
1587.00	0.490	169.540	1586.96	4.52	-2.85	8.69	3258854.28	1413804.81	40°27'56.0459"N	104°34'10.7720"W	0.24
1681.00	0.420	209.360	1680.96	5.18	-3.55	8.59	3258854.18	1413804.11	40°27'56.0390"N	104°34'10.7734"W	0.34
1776.00	0.770	252.940	1775.95	5.51	-4.04	7.81	3258853.40	1413803.62	40°27'56.0343"N	104°34'10.7835"W	0.58
1871.00	0.950	265.880	1870.94	5.47	-4.28	6.41	3258852.00	1413803.38	40°27'56.0320"N	104°34'10.8016"W	0.28
1938.00	0.950	282.410	1937.93	5.18	-4.21	5.32	3258850.91	1413803.45	40°27'56.0329"N	104°34'10.8158"W	0.41
1990.00	0.500	1.820	1989.93	4.78	-3.89	4.90	3258850.49	1413803.77	40°27'56.0361"N	104°34'10.8211"W	1.90
2085.00	2.940	96.930	2084.89	5.15	-3.77	7.34	3258852.93	1413803.89	40°27'56.0370"N	104°34'10.7896"W	3.19
2179.00	5.450	96.520	2178.63	7.28	-4.56	14.16	3258859.75	1413803.10	40°27'56.0284"N	104°34'10.7014"W	2.67
2274.00	8.080	98.020	2272.96	10.90	-6.01	25.26	3258870.85	1413801.65	40°27'56.0130"N	104°34'10.5580"W	2.77
2368.00	10.370	98.190	2365.73	15.94	-8.13	40.18	3258885.77	1413799.53	40°27'55.9904"N	104°34'10.3653"W	2.44
2463.00	12.790	98.000	2458.79	22.31	-10.82	59.06	3258904.64	1413796.84	40°27'55.9620"N	104°34'10.1214"W	2.55
2558.00	16.520	98.560	2550.69	30.43	-14.29	82.83	3258928.42	1413793.37	40°27'55.9252"N	104°34'9.8143"W	3.93
2652.00	19.890	98.570	2639.97	40.47	-18.66	111.87	3258957.46	1413789.00	40°27'55.8790"N	104°34'9.4393"W	3.59



Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (184 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]
2747.00	23.420	98.430	2728.25	52.42	-23.84	146.54	3258992.12	1413783.82	40°27'55.8242"N	104°34'8.9915"W	3.72
2841.00	24.900	98.000	2814.01	65.35	-29.34	184.61	3259030.20	1413778.33	40°27'55.7660"N	104°34'8.4996"W	1.59
2936.00	24.840	96.710	2900.21	78.22	-34.45	224.24	3259069.82	1413773.21	40°27'55.7113"N	104°34'7.9877"W	0.57
3031.00	24.990	98.280	2986.36	91.20	-39.67	263.91	3259109.49	1413767.99	40°27'55.6556"N	104°34'7.4751"W	0.71
3125.00	24.970	98.490	3071.57	104.66	-45.46	303.18	3259148.76	1413762.20	40°27'55.5944"N	104°34'6.9678"W	0.10
3220.00	23.850	98.780	3158.08	118.13	-51.35	342.00	3259187.57	1413756.31	40°27'55.5321"N	104°34'6.4665"W	1.19
3314.00	24.340	98.870	3243.89	131.42	-57.24	379.92	3259225.49	1413750.42	40°27'55.4700"N	104°34'5.9767"W	0.52
3409.00	24.550	98.690	3330.37	145.01	-63.24	418.77	3259264.35	1413744.42	40°27'55.4067"N	104°34'5.4749"W	0.23
3503.00	24.620	95.130	3415.86	157.31	-67.94	457.58	3259303.15	1413739.72	40°27'55.3562"N	104°34'4.9734"W	1.58
3598.00	24.840	94.980	3502.14	168.59	-71.44	497.17	3259342.74	1413736.22	40°27'55.3175"N	104°34'4.4618"W	0.24
3693.00	25.370	95.890	3588.17	180.29	-75.26	537.29	3259382.86	1413732.40	40°27'55.2755"N	104°34'3.9432"W	0.69
3787.00	26.100	95.430	3672.84	192.28	-79.29	577.91	3259423.47	1413728.38	40°27'55.2316"N	104°34'3.4183"W	0.81
3882.00	26.000	95.460	3758.19	204.40	-83.25	619.44	3259465.00	1413724.42	40°27'55.1881"N	104°34'2.8815"W	0.11
3976.00	25.770	94.980	3842.76	216.16	-86.98	660.30	3259505.87	1413720.68	40°27'55.1470"N	104°34'2.3533"W	0.33
4071.00	26.130	94.430	3928.18	227.71	-90.39	701.74	3259547.30	1413717.27	40°27'55.1090"N	104°34'1.8178"W	0.46
4166.00	25.980	95.820	4013.53	239.60	-94.12	743.29	3259588.85	1413713.55	40°27'55.0679"N	104°34'1.2807"W	0.66
4261.00	25.710	95.200	4099.03	251.67	-98.09	784.52	3259630.08	1413709.57	40°27'55.0243"N	104°34'0.7479"W	0.40
4356.00	25.640	95.240	4184.65	263.47	-101.84	825.50	3259671.06	1413705.83	40°27'54.9830"N	104°34'0.2181"W	0.08
4450.00	25.710	95.390	4269.37	275.21	-105.61	866.06	3259711.61	1413702.05	40°27'54.9415"N	104°33'59.6940"W	0.10
4545.00	25.480	96.450	4355.05	287.45	-109.84	906.88	3259752.43	1413697.82	40°27'54.8955"N	104°33'59.1665"W	0.54
4640.00	26.000	94.930	4440.62	299.59	-113.93	947.93	3259793.48	1413693.74	40°27'54.8508"N	104°33'58.6360"W	0.88
4734.00	25.840	95.350	4525.16	311.31	-117.61	988.85	3259834.40	1413690.06	40°27'54.8102"N	104°33'58.1070"W	0.26
4829.00	25.460	95.630	4610.80	323.28	-121.54	1029.79	3259875.34	1413686.12	40°27'54.7671"N	104°33'57.5780"W	0.42
4923.00	25.870	95.090	4695.53	335.04	-125.34	1070.32	3259915.87	1413682.32	40°27'54.7253"N	104°33'57.0541"W	0.50
5018.00	25.690	95.540	4781.07	346.95	-129.17	1111.46	3259957.01	1413678.50	40°27'54.6832"N	104°33'56.5224"W	0.28
5113.00	25.520	95.350	4866.74	358.87	-133.07	1152.33	3259997.88	1413674.60	40°27'54.6405"N	104°33'55.9942"W	0.20
5207.00	26.130	96.020	4951.36	370.93	-137.12	1193.08	3260038.62	1413670.54	40°27'54.5961"N	104°33'55.4676"W	0.72
5302.00	26.100	96.600	5036.66	383.67	-141.72	1234.64	3260080.18	1413665.95	40°27'54.5464"N	104°33'54.9306"W	0.27
5396.00	23.550	98.330	5121.96	396.42	-146.82	1273.77	3260119.31	1413660.85	40°27'54.4919"N	104°33'54.4251"W	2.82
5491.00	24.990	100.650	5208.57	410.39	-153.28	1312.27	3260157.81	1413654.39	40°27'54.4241"N	104°33'53.9278"W	1.82



Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (184 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]
5586.00	24.610	96.450	5294.81	424.01	-159.21	1351.65	3260197.19	1413648.46	40°27'54.3614"N	104°33'53.4192"W	1.90
5680.00	23.280	96.290	5380.72	435.68	-163.44	1389.56	3260235.10	1413644.22	40°27'54.3156"N	104°33'52.9292"W	1.42
5775.00	23.930	96.600	5467.77	447.36	-167.71	1427.36	3260272.90	1413639.95	40°27'54.2694"N	104°33'52.4408"W	0.70
5869.00	25.870	96.160	5553.03	459.46	-172.11	1466.69	3260312.23	1413635.56	40°27'54.2219"N	104°33'51.9326"W	2.07
5964.00	25.740	96.290	5638.56	472.00	-176.59	1507.80	3260353.34	1413631.08	40°27'54.1734"N	104°33'51.4013"W	0.15
6058.00	25.440	96.260	5723.34	484.35	-181.03	1548.16	3260393.69	1413626.64	40°27'54.1253"N	104°33'50.8798"W	0.32
6153.00	24.920	95.570	5809.31	496.41	-185.19	1588.36	3260433.89	1413622.47	40°27'54.0799"N	104°33'50.3603"W	0.63
6248.00	24.260	96.280	5895.69	508.20	-189.27	1627.68	3260473.21	1413618.40	40°27'54.0355"N	104°33'49.8522"W	0.76
6342.00	26.520	96.060	5980.61	520.39	-193.60	1667.75	3260513.28	1413614.07	40°27'53.9886"N	104°33'49.3344"W	2.41
6437.00	26.690	96.140	6065.55	533.20	-198.12	1710.06	3260555.58	1413609.55	40°27'53.9395"N	104°33'48.7877"W	0.18
6531.00	26.430	96.320	6149.63	545.96	-202.68	1751.84	3260597.36	1413604.99	40°27'53.8901"N	104°33'48.2478"W	0.29
6626.00	27.470	103.120	6234.33	561.51	-209.99	1794.20	3260639.73	1413597.68	40°27'53.8135"N	104°33'47.7007"W	3.42
6721.00	28.910	123.870	6318.26	587.01	-227.80	1834.71	3260680.23	1413579.87	40°27'53.6332"N	104°33'47.1791"W	10.38
6815.00	32.540	136.380	6399.14	624.60	-258.81	1871.07	3260716.58	1413548.86	40°27'53.3231"N	104°33'46.7130"W	7.80
6910.00	38.000	147.830	6476.76	673.67	-302.14	1904.32	3260749.84	1413505.53	40°27'52.8914"N	104°33'46.2887"W	9.01
7004.00	44.240	149.920	6547.54	731.86	-355.06	1936.20	3260781.71	1413452.61	40°27'52.3652"N	104°33'45.8836"W	6.80
7099.00	49.580	157.410	6612.46	798.84	-417.22	1966.74	3260812.26	1413390.46	40°27'51.7478"N	104°33'45.4969"W	8.04
7193.00	56.300	162.140	6669.10	872.91	-487.58	1992.52	3260838.03	1413320.10	40°27'51.0499"N	104°33'45.1730"W	8.20
7288.00	62.720	165.950	6717.29	954.46	-566.25	2014.92	3260860.43	1413241.43	40°27'50.2702"N	104°33'44.8940"W	7.59
7382.00	68.210	169.700	6756.32	1039.92	-649.80	2032.88	3260878.39	1413157.89	40°27'49.4428"N	104°33'44.6731"W	6.87
7477.00	75.790	173.630	6785.67	1130.04	-739.12	2045.90	3260891.41	1413068.57	40°27'48.5589"N	104°33'44.5169"W	8.89
7572.00	81.100	179.140	6804.70	1222.17	-831.94	2051.72	3260897.23	1412975.75	40°27'47.6411"N	104°33'44.4543"W	7.97
7666.00	88.030	179.640	6813.60	1314.03	-925.45	2052.72	3260898.23	1412882.24	40°27'46.7170"N	104°33'44.4542"W	7.39
7761.00	90.180	179.030	6815.08	1407.34	-1020.43	2053.82	3260899.33	1412787.27	40°27'45.7784"N	104°33'44.4529"W	2.35
7855.00	89.480	177.610	6815.36	1499.98	-1114.39	2056.57	3260902.09	1412693.32	40°27'44.8497"N	104°33'44.4301"W	1.68
7950.00	90.650	178.450	6815.26	1593.68	-1209.33	2059.84	3260905.35	1412598.38	40°27'43.9113"N	104°33'44.4009"W	1.52
8044.00	90.770	178.710	6814.09	1686.24	-1303.29	2062.17	3260907.68	1412504.42	40°27'42.9826"N	104°33'44.3836"W	0.30
8139.00	90.650	178.140	6812.91	1779.83	-1398.25	2064.78	3260910.29	1412409.47	40°27'42.0440"N	104°33'44.3628"W	0.61
8233.00	90.520	178.180	6811.95	1872.51	-1492.19	2067.80	3260913.31	1412315.52	40°27'41.1154"N	104°33'44.3366"W	0.14
8327.00	89.720	178.270	6811.76	1965.18	-1586.15	2070.71	3260916.22	1412221.57	40°27'40.1868"N	104°33'44.3118"W	0.86



Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (184 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]
8422.00	90.090	177.840	6811.91	2058.88	-1681.09	2073.93	3260919.44	1412126.63	40°27'39.2483"N	104°33'44.2831"W	0.60
8517.00	90.220	178.120	6811.66	2152.60	-1776.03	2077.28	3260922.79	1412031.70	40°27'38.3098"N	104°33'44.2528"W	0.32
8611.00	90.340	178.020	6811.20	2245.31	-1869.98	2080.45	3260925.96	1411937.75	40°27'37.3812"N	104°33'44.2247"W	0.17
8706.00	90.120	178.470	6810.82	2338.95	-1964.93	2083.36	3260928.87	1411842.80	40°27'36.4427"N	104°33'44.2000"W	0.53
8801.00	89.880	178.110	6810.82	2432.59	-2059.89	2086.19	3260931.70	1411747.85	40°27'35.5041"N	104°33'44.1763"W	0.46
8896.00	90.000	178.510	6810.92	2526.22	-2154.85	2088.99	3260934.50	1411652.89	40°27'34.5655"N	104°33'44.1531"W	0.44
8990.00	89.880	178.120	6811.01	2618.86	-2248.81	2091.76	3260937.27	1411558.94	40°27'33.6369"N	104°33'44.1302"W	0.43
9085.00	90.090	178.090	6811.04	2712.55	-2343.76	2094.90	3260940.41	1411463.99	40°27'32.6983"N	104°33'44.1025"W	0.22
9179.00	90.060	177.790	6810.92	2805.29	-2437.69	2098.28	3260943.79	1411370.06	40°27'31.7698"N	104°33'44.0717"W	0.32
9274.00	90.520	178.310	6810.44	2898.99	-2532.64	2101.51	3260947.02	1411275.12	40°27'30.8313"N	104°33'44.0428"W	0.73
9368.00	90.830	178.130	6809.33	2991.65	-2626.59	2104.43	3260949.94	1411181.17	40°27'29.9027"N	104°33'44.0179"W	0.38
9463.00	89.200	178.350	6809.30	3085.30	-2721.54	2107.35	3260952.86	1411086.23	40°27'28.9642"N	104°33'43.9932"W	1.73
9557.00	89.880	178.860	6810.06	3177.85	-2815.51	2109.64	3260955.15	1410992.26	40°27'28.0354"N	104°33'43.9764"W	0.90
9652.00	89.750	177.510	6810.36	3271.52	-2910.46	2112.65	3260958.15	1410897.32	40°27'27.0969"N	104°33'43.9505"W	1.43
9746.00	90.030	177.180	6810.55	3364.41	-3004.35	2117.00	3260962.51	1410803.42	40°27'26.1687"N	104°33'43.9070"W	0.46
9841.00	89.480	177.420	6810.95	3458.31	-3099.25	2121.47	3260966.98	1410708.53	40°27'25.2306"N	104°33'43.8621"W	0.63
9936.00	89.450	177.200	6811.84	3552.20	-3194.14	2125.93	3260971.44	1410613.64	40°27'24.2925"N	104°33'43.8174"W	0.23
10030.00	90.090	177.300	6812.22	3645.12	-3288.03	2130.44	3260975.95	1410519.76	40°27'23.3643"N	104°33'43.7719"W	0.69
10125.00	90.550	177.760	6811.69	3738.96	-3382.94	2134.54	3260980.05	1410424.85	40°27'22.4260"N	104°33'43.7320"W	0.68
10219.00	89.510	177.300	6811.64	3831.81	-3476.85	2138.59	3260984.10	1410330.94	40°27'21.4977"N	104°33'43.6924"W	1.21
10314.00	89.080	177.170	6812.81	3925.72	-3571.73	2143.17	3260988.68	1410236.06	40°27'20.5597"N	104°33'43.6461"W	0.47
10408.00	90.250	177.070	6813.35	4018.67	-3665.61	2147.89	3260993.40	1410142.19	40°27'19.6316"N	104°33'43.5979"W	1.25
10503.00	89.750	177.780	6813.35	4112.53	-3760.51	2152.16	3260997.67	1410047.29	40°27'18.6934"N	104°33'43.5556"W	0.91
10598.00	89.720	177.140	6813.79	4206.39	-3855.42	2156.37	3261001.88	1409952.39	40°27'17.7552"N	104°33'43.5142"W	0.67
10692.00	89.540	179.870	6814.40	4298.97	-3949.38	2158.82	3261004.33	1409858.44	40°27'16.8265"N	104°33'43.4953"W	2.91
10786.00	90.250	180.840	6814.57	4390.98	-4043.37	2158.24	3261003.75	1409764.44	40°27'15.8978"N	104°33'43.5157"W	1.28
10881.00	90.400	180.410	6814.03	4483.89	-4138.36	2157.20	3261002.71	1409669.45	40°27'14.9593"N	104°33'43.5421"W	0.48
10975.00	90.620	180.720	6813.20	4575.83	-4232.36	2156.28	3261001.79	1409575.47	40°27'14.0307"N	104°33'43.5669"W	0.40
11070.00	90.580	180.520	6812.20	4668.73	-4327.34	2155.25	3261000.76	1409480.48	40°27'13.0922"N	104°33'43.5932"W	0.21
11164.00	90.520	180.800	6811.30	4760.64	-4421.33	2154.17	3260999.67	1409386.49	40°27'12.1636"N	104°33'43.6201"W	0.30



Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (184 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]
11259.00	90.310	180.640	6810.61	4853.51	-4516.32	2152.97	3260998.48	1409291.51	40°27'11.2251"N	104°33'43.6485"W	0.28
11353.00	90.370	181.030	6810.05	4945.36	-4610.31	2151.60	3260997.11	1409197.52	40°27'10.2966"N	104°33'43.6791"W	0.42
11448.00	90.580	180.580	6809.27	5038.19	-4705.30	2150.27	3260995.78	1409102.54	40°27'9.3582"N	104°33'43.7094"W	0.52
11542.00	90.620	180.870	6808.28	5130.08	-4799.29	2149.08	3260994.59	1409008.56	40°27'8.4296"N	104°33'43.7376"W	0.31
11637.00	90.460	181.100	6807.39	5222.85	-4894.27	2147.45	3260992.95	1408913.58	40°27'7.4912"N	104°33'43.7717"W	0.29
11732.00	90.340	180.780	6806.72	5315.64	-4989.25	2145.89	3260991.40	1408818.60	40°27'6.5529"N	104°33'43.8049"W	0.36
11826.00	90.680	180.990	6805.89	5407.47	-5083.24	2144.44	3260989.94	1408724.62	40°27'5.6243"N	104°33'43.8365"W	0.43
11921.00	90.400	180.410	6804.99	5500.35	-5178.23	2143.28	3260988.78	1408629.63	40°27'4.6859"N	104°33'43.8645"W	0.68
12015.00	90.620	180.960	6804.16	5592.25	-5272.22	2142.15	3260987.66	1408535.65	40°27'3.7573"N	104°33'43.8919"W	0.63
12110.00	90.370	180.720	6803.33	5685.07	-5367.20	2140.76	3260986.27	1408440.66	40°27'2.8189"N	104°33'43.9229"W	0.36
12204.00	89.690	180.950	6803.29	5776.93	-5461.19	2139.39	3260984.90	1408346.68	40°27'1.8903"N	104°33'43.9535"W	0.76
12299.00	90.250	181.550	6803.34	5869.61	-5556.17	2137.32	3260982.83	1408251.70	40°27'0.9521"N	104°33'43.9933"W	0.86
12394.00	89.910	180.440	6803.20	5962.38	-5651.15	2135.67	3260981.18	1408156.72	40°27'0.0137"N	104°33'44.0276"W	1.22
12488.00	90.180	180.690	6803.13	6054.32	-5745.15	2134.74	3260980.25	1408062.73	40°26'59.0850"N	104°33'44.0525"W	0.39
12583.00	89.880	180.620	6803.08	6147.22	-5840.14	2133.65	3260979.16	1407967.74	40°26'58.1465"N	104°33'44.0795"W	0.32
12677.00	89.970	180.800	6803.20	6239.11	-5934.13	2132.49	3260978.00	1407873.75	40°26'57.2179"N	104°33'44.1074"W	0.21
12772.00	90.060	180.370	6803.18	6332.03	-6029.13	2131.52	3260977.03	1407778.76	40°26'56.2794"N	104°33'44.1330"W	0.46
12867.00	89.850	180.160	6803.25	6425.06	-6124.13	2131.08	3260976.59	1407683.77	40°26'55.3407"N	104°33'44.1517"W	0.31
12961.00	89.970	180.230	6803.40	6517.13	-6218.13	2130.76	3260976.27	1407589.77	40°26'54.4119"N	104°33'44.1687"W	0.15
13056.00	89.880	180.680	6803.52	6610.09	-6313.12	2130.01	3260975.51	1407494.78	40°26'53.4734"N	104°33'44.1914"W	0.48
13150.00	89.850	180.180	6803.75	6702.08	-6407.12	2129.30	3260974.81	1407400.79	40°26'52.5446"N	104°33'44.2134"W	0.53
13245.00	89.910	180.880	6803.94	6795.01	-6502.11	2128.42	3260973.93	1407305.79	40°26'51.6061"N	104°33'44.2377"W	0.74
13339.00	90.550	181.130	6803.57	6886.81	-6596.10	2126.77	3260972.28	1407211.81	40°26'50.6776"N	104°33'44.2719"W	0.73
13434.00	90.180	179.900	6802.96	6979.74	-6691.09	2125.92	3260971.43	1407116.82	40°26'49.7391"N	104°33'44.2960"W	1.35
13528.00	90.180	180.590	6802.67	7071.80	-6785.09	2125.52	3260971.03	1407022.83	40°26'48.8103"N	104°33'44.3140"W	0.73
13623.00	89.910	179.720	6802.59	7164.86	-6880.09	2125.26	3260970.77	1406927.83	40°26'47.8717"N	104°33'44.3303"W	0.96
13717.00	89.940	180.000	6802.71	7257.04	-6974.09	2125.49	3260971.00	1406833.84	40°26'46.9428"N	104°33'44.3402"W	0.30
13812.00	89.910	179.570	6802.84	7350.22	-7069.09	2125.85	3260971.36	1406738.84	40°26'46.0041"N	104°33'44.3486"W	0.45
13906.00	89.660	179.600	6803.19	7442.49	-7163.08	2126.53	3260972.04	1406644.85	40°26'45.0752"N	104°33'44.3526"W	0.27
14001.00	90.490	179.990	6803.07	7535.67	-7258.08	2126.87	3260972.38	1406549.86	40°26'44.1365"N	104°33'44.3612"W	0.97



Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (184 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]
14096.00	89.540	180.040	6803.04	7628.78	-7353.08	2126.84	3260972.35	1406454.86	40°26'43.1978"N	104°33'44.3746"W	1.00
14190.00	90.000	179.850	6803.42	7720.93	-7447.08	2126.93	3260972.44	1406360.87	40°26'42.2690"N	104°33'44.3862"W	0.53
14285.00	90.620	179.550	6802.91	7814.14	-7542.08	2127.43	3260972.94	1406265.87	40°26'41.3303"N	104°33'44.3928"W	0.73
14379.00	90.220	180.230	6802.22	7906.30	-7636.07	2127.61	3260973.12	1406171.88	40°26'40.4015"N	104°33'44.4033"W	0.84
14474.00	89.940	180.570	6802.08	7999.29	-7731.07	2126.95	3260972.46	1406076.89	40°26'39.4629"N	104°33'44.4249"W	0.46
14568.00	92.740	181.750	6799.89	8090.99	-7825.01	2125.05	3260970.55	1405982.94	40°26'38.5349"N	104°33'44.4623"W	3.23
14663.00	90.120	180.370	6797.52	8183.70	-7919.96	2123.29	3260968.80	1405888.00	40°26'37.5969"N	104°33'44.4980"W	3.12
14757.00	90.710	180.430	6796.83	8275.70	-8013.95	2122.63	3260968.14	1405794.01	40°26'36.6682"N	104°33'44.5194"W	0.63
14852.00	90.650	178.640	6795.71	8368.95	-8108.94	2123.40	3260968.91	1405699.03	40°26'35.7296"N	104°33'44.5224"W	1.89
14946.00	90.340	178.760	6794.90	8461.48	-8202.91	2125.54	3260971.05	1405605.06	40°26'34.8008"N	104°33'44.5077"W	0.35
15041.00	90.580	178.420	6794.13	8555.03	-8297.88	2127.87	3260973.38	1405510.10	40°26'33.8622"N	104°33'44.4904"W	0.44
15135.00	90.340	178.640	6793.38	8647.61	-8391.84	2130.29	3260975.79	1405416.14	40°26'32.9334"N	104°33'44.4721"W	0.35
15230.00	90.370	178.290	6792.79	8741.19	-8486.81	2132.83	3260978.34	1405321.18	40°26'31.9948"N	104°33'44.4522"W	0.37
15324.00	90.520	178.340	6792.06	8833.83	-8580.76	2135.59	3260981.10	1405227.22	40°26'31.0662"N	104°33'44.4293"W	0.17
15514.00	90.580	177.950	6790.24	9021.17	-8770.66	2141.74	3260987.25	1405037.34	40°26'29.1892"N	104°33'44.3757"W	0.21
15608.00	90.150	179.050	6789.64	9113.76	-8864.62	2144.20	3260989.71	1404943.38	40°26'28.2605"N	104°33'44.3567"W	1.26
15703.00	90.490	179.080	6789.11	9207.17	-8959.61	2145.75	3260991.26	1404848.40	40°26'27.3217"N	104°33'44.3497"W	0.36
15797.00	90.370	178.990	6788.40	9299.60	-9053.59	2147.34	3260992.85	1404754.42	40°26'26.3929"N	104°33'44.3421"W	0.16
15892.00	90.220	179.030	6787.91	9393.02	-9148.57	2148.98	3260994.49	1404659.43	40°26'25.4542"N	104°33'44.3338"W	0.16
15986.00	90.310	178.640	6787.48	9485.52	-9242.55	2150.89	3260996.40	1404565.46	40°26'24.5254"N	104°33'44.3220"W	0.43
16081.00	89.450	178.070	6787.68	9579.13	-9337.51	2153.62	3260999.13	1404470.50	40°26'23.5868"N	104°33'44.2997"W	1.09
16176.00	89.880	178.550	6788.23	9672.76	-9432.47	2156.42	3261001.93	1404375.55	40°26'22.6483"N	104°33'44.2764"W	0.68
16270.00	89.820	180.670	6788.48	9765.01	-9526.46	2157.06	3261002.57	1404281.56	40°26'21.7194"N	104°33'44.2810"W	2.26
16365.00	89.630	180.020	6788.93	9858.01	-9621.46	2156.49	3261001.99	1404186.57	40°26'20.7808"N	104°33'44.3014"W	0.71
16459.00	89.970	180.510	6789.26	9950.06	-9715.46	2156.05	3261001.56	1404092.57	40°26'19.8521"N	104°33'44.3199"W	0.63
16553.00	90.120	179.950	6789.19	10042.11	-9809.46	2155.67	3261001.18	1403998.58	40°26'18.9233"N	104°33'44.3376"W	0.62
16648.00	89.940	180.060	6789.14	10135.23	-9904.46	2155.67	3261001.17	1403903.58	40°26'17.9846"N	104°33'44.3507"W	0.22
16742.00	89.690	180.510	6789.44	10227.27	-9998.45	2155.20	3261000.71	1403809.59	40°26'17.0559"N	104°33'44.3696"W	0.55
16837.00	90.000	180.450	6789.70	10320.22	-10093.45	2154.40	3260999.91	1403714.60	40°26'16.1173"N	104°33'44.3929"W	0.33
16932.00	90.060	180.150	6789.65	10413.23	-10188.45	2153.91	3260999.41	1403619.60	40°26'15.1787"N	104°33'44.4123"W	0.32



Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]
17026.00	89.910	179.950	6789.67	10505.35	-10282.45	2153.82	3260999.33	1403525.60	40°26'14.2499"N	104°33'44.4262"W	0.27
17121.00	89.750	180.490	6789.95	10598.39	-10377.45	2153.46	3260998.97	1403430.61	40°26'13.3112"N	104°33'44.4439"W	0.59
17215.00	89.850	180.420	6790.28	10690.38	-10471.44	2152.71	3260998.22	1403336.62	40°26'12.3825"N	104°33'44.4664"W	0.13
17282.00‡	89.850	180.420	6790.46	10755.95	-10538.44	2152.22	3260997.73	1403269.62	40°26'11.7206"N	104°33'44.4820"W	0.00

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.28-T06N-R64W	0.00	-22.48	0.15	3258845.74	1413785.18	40°27'55.8528"N	104°34'10.8851"W	polygon
	2D Polygon: dimensions not calculated							
SEC.33-T06N-R64W	0.00	-22.48	0.15	3258845.74	1413785.18	40°27'55.8528"N	104°34'10.8851"W	polygon
	2D Polygon: dimensions not calculated							
RAMPART A33-780 BHL REV-1(460'FSL & 636'FWL,SEC.33)	6787.00	-10540.24	2131.89	3260977.40	1403267.82	40°26'11.7049"N	104°33'44.7451"W	point
RAMPART A33-780 TPZ REV-1(460'FNL & 660'FWL,SEC.28)	6814.00	-922.29	2078.69	3260924.20	1412885.40	40°27'46.7455"N	104°33'44.1178"W	point



Actual Wellpath Report

RAMPART A33-780 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	RAMPART A33-780
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350934
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-780 AWB
Slot	SLOT#15 RAMPART A33-780 (493'FSL & 1414'FEL,SEC.20)		

WELLPATH COMPOSITION - Ref Wellbore: RAMPART A33-780 AWB Ref Wellpath: RAMPART A33-780 AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1938.00	Gyrodatta 2015 - GC+DROP+COND	Gyrodatta 2015 - GC+DROP+COND 13-1/2" <80 - 1938>	RAMPART A33-780 AWB	9/7/2021
1938.00	17282.00	OWSG MWD rev2 (MS+IFR1)	OWSG MWD rev2 (MS+IFR1) 8-1/2" <1990 - 17215>	RAMPART A33-780 AWB	9/27/2021