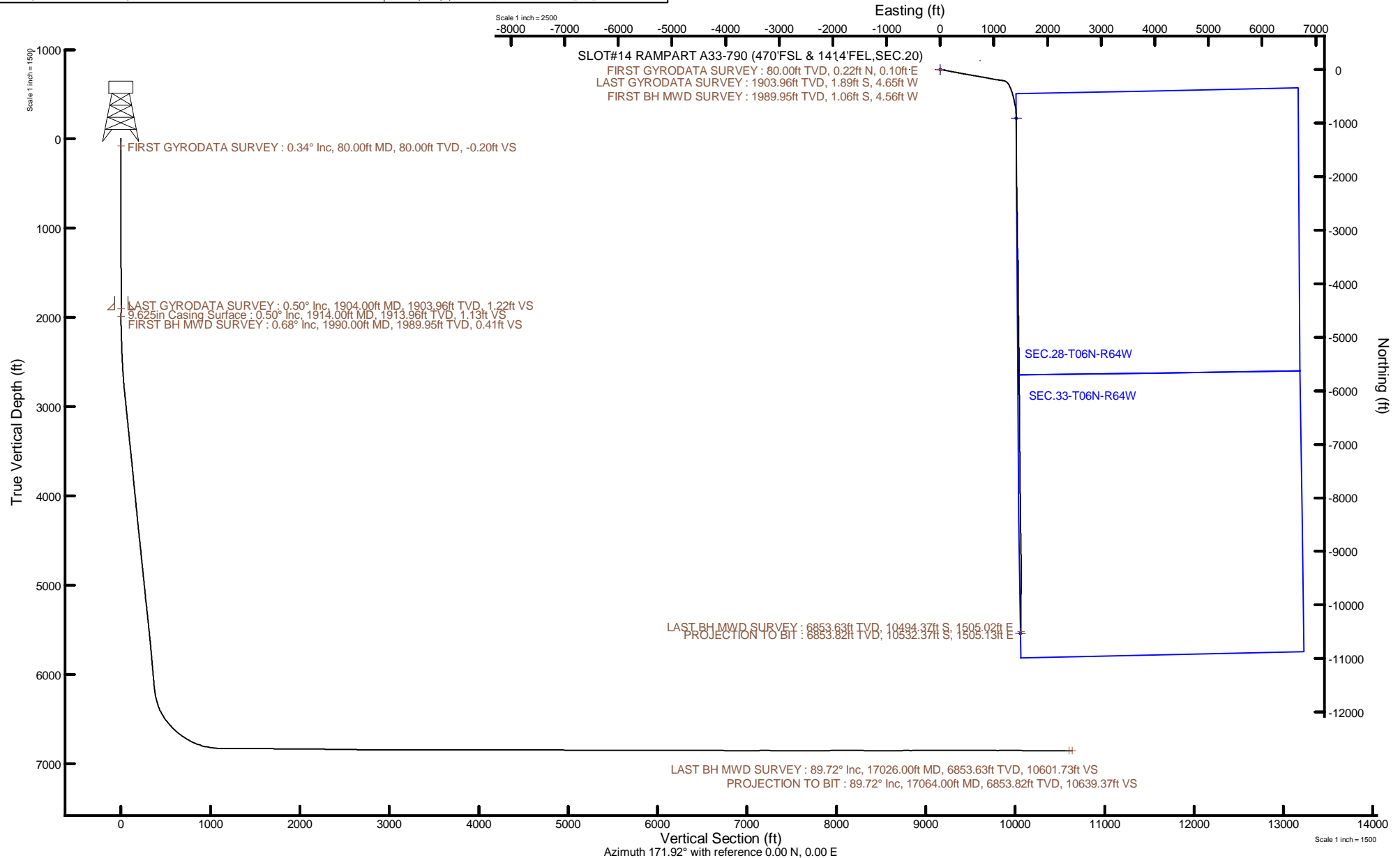


NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#14 RAMPART A33-790 (470°FSL & 1414°FEL,SEC.20)
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: RAMPART A33-790
Facility: SEC.20-T06N-R64W Wellbore: RAMPART A33-790 PWB

Plot reference wellpath is RAMPART A33-790 PWP Rev-C.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#14 RAMPART A33-790 (470°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: manajohj on 2021-09-27; Database: WellArchitectDB_Local_Denver





Actual Wellpath Report

RAMPART A33-790 AWP

Page 1 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'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 10:12:59 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	-164.51	-737.72	3258845.74	1413785.18	40°27'55.8528"N	104°34'10.8851"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#14 RAMPART A33-790 (470'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	171.92°



Actual Wellpath Report

RAMPART A33-790 AWP

Page 2 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (183 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	23.610	0.00	0.00	0.00	0.00	3258845.74	1413785.18	40°27'55.8528"N	104°34'10.8851"W	0.00
80.00	0.340	23.610	80.00	-0.20	0.22	0.10	3258845.84	1413785.40	40°27'55.8550"N	104°34'10.8839"W	0.43
173.00	0.360	306.030	173.00	-0.64	0.64	-0.03	3258845.71	1413785.82	40°27'55.8592"N	104°34'10.8854"W	0.47
264.00	0.330	327.750	264.00	-1.08	1.03	-0.40	3258845.34	1413786.21	40°27'55.8631"N	104°34'10.8902"W	0.15
327.00	0.280	329.770	327.00	-1.39	1.32	-0.58	3258845.16	1413786.50	40°27'55.8659"N	104°34'10.8924"W	0.08
422.00	0.250	292.890	421.99	-1.71	1.60	-0.88	3258844.86	1413786.78	40°27'55.8687"N	104°34'10.8963"W	0.18
516.00	0.380	325.900	515.99	-2.09	1.94	-1.25	3258844.49	1413787.12	40°27'55.8721"N	104°34'10.9010"W	0.23
610.00	0.540	267.110	609.99	-2.41	2.17	-1.86	3258843.88	1413787.35	40°27'55.8745"N	104°34'10.9089"W	0.50
705.00	0.390	174.610	704.99	-2.13	1.83	-2.28	3258843.46	1413787.01	40°27'55.8712"N	104°34'10.9144"W	0.72
799.00	0.260	110.990	798.99	-1.71	1.43	-2.05	3258843.69	1413786.61	40°27'55.8672"N	104°34'10.9115"W	0.38
894.00	0.090	84.810	893.99	-1.60	1.36	-1.78	3258843.96	1413786.54	40°27'55.8665"N	104°34'10.9079"W	0.19
988.00	0.110	148.830	987.99	-1.51	1.29	-1.66	3258844.08	1413786.47	40°27'55.8658"N	104°34'10.9064"W	0.11
1083.00	0.190	95.490	1082.99	-1.39	1.20	-1.45	3258844.29	1413786.38	40°27'55.8649"N	104°34'10.9037"W	0.16
1177.00	0.290	197.430	1176.99	-1.14	0.96	-1.37	3258844.37	1413786.14	40°27'55.8625"N	104°34'10.9027"W	0.40
1272.00	0.360	168.630	1271.98	-0.63	0.44	-1.38	3258844.36	1413785.62	40°27'55.8573"N	104°34'10.9029"W	0.18
1366.00	0.410	174.710	1365.98	0.00	-0.19	-1.29	3258844.45	1413784.99	40°27'55.8511"N	104°34'10.9019"W	0.07
1461.00	0.650	199.050	1460.98	0.82	-1.04	-1.44	3258844.30	1413784.14	40°27'55.8428"N	104°34'10.9039"W	0.34
1556.00	0.640	218.270	1555.97	1.67	-1.96	-1.94	3258843.80	1413783.22	40°27'55.8337"N	104°34'10.9105"W	0.23
1650.00	0.470	227.230	1649.97	2.25	-2.64	-2.55	3258843.19	1413782.54	40°27'55.8271"N	104°34'10.9185"W	0.20
1745.00	0.640	280.020	1744.96	2.31	-2.81	-3.36	3258842.38	1413782.37	40°27'55.8254"N	104°34'10.9289"W	0.54
1839.00	0.640	308.920	1838.96	1.76	-2.39	-4.28	3258841.46	1413782.79	40°27'55.8297"N	104°34'10.9409"W	0.34
1904.00	0.500	342.880	1903.96	1.22	-1.89	-4.65	3258841.09	1413783.29	40°27'55.8347"N	104°34'10.9455"W	0.55
1990.00	0.680	23.600	1989.95	0.41	-1.06	-4.56	3258841.18	1413784.12	40°27'55.8428"N	104°34'10.9442"W	0.52
2085.00	2.960	99.710	2084.90	0.68	-0.96	-1.91	3258843.83	1413784.22	40°27'55.8436"N	104°34'10.9100"W	3.02
2179.00	5.830	99.670	2178.62	2.88	-2.17	5.19	3258850.93	1413783.01	40°27'55.8309"N	104°34'10.8183"W	3.05
2274.00	7.330	99.080	2272.99	6.14	-3.94	15.93	3258861.67	1413781.24	40°27'55.8123"N	104°34'10.6796"W	1.58
2368.00	6.950	98.820	2366.26	9.56	-5.76	27.47	3258873.21	1413779.42	40°27'55.7931"N	104°34'10.5305"W	0.41
2463.00	7.930	99.890	2460.46	13.26	-7.76	39.61	3258885.35	1413777.42	40°27'55.7720"N	104°34'10.3738"W	1.04
2558.00	10.410	100.250	2554.24	17.98	-10.42	54.51	3258900.25	1413774.76	40°27'55.7443"N	104°34'10.1813"W	2.61
2652.00	12.910	99.650	2646.29	23.85	-13.69	73.22	3258918.96	1413771.49	40°27'55.7100"N	104°34'9.9397"W	2.66



Actual Wellpath Report

RAMPART A33-790 AWP

Page 3 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (183 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	15.230	100.080	2738.44	30.97	-17.65	95.97	3258941.71	1413767.53	40°27'55.6685"N	104°34'9.6459"W	2.44
2841.00	17.910	100.370	2828.52	39.40	-22.41	122.35	3258968.09	1413762.77	40°27'55.6187"N	104°34'9.3053"W	2.85
2936.00	17.600	99.960	2919.00	48.47	-27.53	150.87	3258996.60	1413757.65	40°27'55.5652"N	104°34'8.9371"W	0.35
3031.00	17.920	100.550	3009.47	57.59	-32.69	179.38	3259025.11	1413752.49	40°27'55.5112"N	104°34'8.5689"W	0.39
3125.00	17.980	100.680	3098.90	66.88	-38.02	207.85	3259053.59	1413747.16	40°27'55.4556"N	104°34'8.2012"W	0.08
3220.00	16.810	102.220	3189.55	76.36	-43.65	235.69	3259081.42	1413741.53	40°27'55.3971"N	104°34'7.8419"W	1.32
3314.00	17.430	99.820	3279.39	85.41	-48.93	262.85	3259108.58	1413736.25	40°27'55.3421"N	104°34'7.4913"W	1.00
3409.00	17.720	100.150	3369.95	94.30	-53.90	291.10	3259136.83	1413731.28	40°27'55.2900"N	104°34'7.1264"W	0.32
3504.00	17.590	101.280	3460.48	103.59	-59.26	319.41	3259165.13	1413725.92	40°27'55.2342"N	104°34'6.7609"W	0.39
3598.00	17.690	100.680	3550.06	112.89	-64.68	347.37	3259193.10	1413720.50	40°27'55.1777"N	104°34'6.3999"W	0.22
3693.00	18.130	99.630	3640.45	122.03	-69.83	376.13	3259221.85	1413715.35	40°27'55.1238"N	104°34'6.0286"W	0.57
3787.00	17.950	99.730	3729.83	130.91	-74.73	404.82	3259250.55	1413710.46	40°27'55.0725"N	104°34'5.6580"W	0.19
3882.00	18.030	99.680	3820.19	139.88	-79.67	433.74	3259279.47	1413705.51	40°27'55.0206"N	104°34'5.2845"W	0.09
3976.00	17.940	100.160	3909.59	148.85	-84.67	462.33	3259308.06	1413700.51	40°27'54.9682"N	104°34'4.9153"W	0.18
4071.00	17.630	100.140	4000.05	157.93	-89.79	490.90	3259336.62	1413695.40	40°27'54.9147"N	104°34'4.5465"W	0.33
4166.00	17.870	99.770	4090.53	166.89	-94.79	519.42	3259365.14	1413690.39	40°27'54.8623"N	104°34'4.1781"W	0.28
4261.00	17.700	100.340	4180.99	175.93	-99.86	547.99	3259393.71	1413685.33	40°27'54.8093"N	104°34'3.8092"W	0.26
4356.00	17.730	100.220	4271.49	185.03	-105.02	576.44	3259422.15	1413680.17	40°27'54.7554"N	104°34'3.4419"W	0.05
4450.00	18.500	100.400	4360.83	194.26	-110.25	605.19	3259450.91	1413674.94	40°27'54.7007"N	104°34'3.0706"W	0.82
4545.00	18.590	99.890	4450.89	203.71	-115.57	634.93	3259480.65	1413669.62	40°27'54.6450"N	104°34'2.6866"W	0.20
4640.00	18.280	100.170	4541.02	213.05	-120.80	664.52	3259510.23	1413664.38	40°27'54.5902"N	104°34'2.3046"W	0.34
4734.00	18.240	99.490	4630.29	222.11	-125.83	693.54	3259539.25	1413659.36	40°27'54.5375"N	104°34'1.9298"W	0.23
4829.00	18.270	100.200	4720.50	231.27	-130.92	722.86	3259568.57	1413654.27	40°27'54.4842"N	104°34'1.5512"W	0.24
4924.00	18.230	99.980	4810.73	240.55	-136.13	752.15	3259597.86	1413649.06	40°27'54.4297"N	104°34'1.1730"W	0.08
5018.00	18.300	99.990	4899.99	249.69	-141.24	781.16	3259626.87	1413643.95	40°27'54.3762"N	104°34'0.7983"W	0.07
5113.00	18.470	99.990	4990.14	258.98	-146.44	810.67	3259656.38	1413638.75	40°27'54.3217"N	104°34'0.4173"W	0.18
5207.00	18.130	99.760	5079.39	268.08	-151.50	839.75	3259685.46	1413633.69	40°27'54.2687"N	104°34'0.0418"W	0.37
5302.00	18.060	101.290	5169.69	277.50	-156.89	868.75	3259714.46	1413628.30	40°27'54.2124"N	104°33'59.6672"W	0.51
5397.00	17.670	101.840	5260.11	287.30	-162.73	897.31	3259743.01	1413622.46	40°27'54.1518"N	104°33'59.2986"W	0.45
5491.00	18.080	100.830	5349.57	296.89	-168.40	925.60	3259771.30	1413616.79	40°27'54.0928"N	104°33'58.9334"W	0.55



Actual Wellpath Report

RAMPART A33-790 AWP

Page 4 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (183 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	18.160	100.750	5439.86	306.44	-173.93	954.62	3259800.32	1413611.26	40°27'54.0351"N	104°33'58.5587"W	0.09
5680.00	18.090	101.000	5529.20	315.94	-179.44	983.34	3259829.04	1413605.74	40°27'53.9776"N	104°33'58.1879"W	0.11
5775.00	18.220	99.320	5619.47	325.21	-184.66	1012.47	3259858.17	1413600.52	40°27'53.9230"N	104°33'57.8117"W	0.57
5869.00	18.120	97.880	5708.78	333.62	-189.05	1041.45	3259887.15	1413596.14	40°27'53.8767"N	104°33'57.4374"W	0.49
5964.00	18.200	97.790	5799.05	341.75	-193.08	1070.78	3259916.48	1413592.10	40°27'53.8338"N	104°33'57.0585"W	0.09
6058.00	18.150	97.710	5888.36	349.75	-197.04	1099.84	3259945.53	1413588.15	40°27'53.7917"N	104°33'56.6832"W	0.06
6153.00	18.000	97.810	5978.67	357.79	-201.02	1129.04	3259974.74	1413584.17	40°27'53.7493"N	104°33'56.3059"W	0.16
6248.00	18.040	97.750	6069.01	365.83	-205.00	1158.16	3260003.86	1413580.19	40°27'53.7070"N	104°33'55.9297"W	0.05
6342.00	17.910	97.660	6158.42	373.72	-208.88	1186.91	3260032.60	1413576.30	40°27'53.6655"N	104°33'55.5584"W	0.14
6437.00	19.620	117.430	6248.46	386.96	-218.19	1215.57	3260061.26	1413567.00	40°27'53.5706"N	104°33'55.1888"W	6.90
6532.00	22.980	133.560	6337.03	410.80	-238.34	1243.20	3260088.89	1413546.85	40°27'53.3686"N	104°33'54.8341"W	7.08
6626.00	29.210	146.880	6421.48	446.03	-270.25	1269.07	3260114.77	1413514.94	40°27'53.0506"N	104°33'54.5037"W	9.06
6721.00	36.380	153.300	6501.31	493.81	-314.91	1294.44	3260140.13	1413470.28	40°27'52.6067"N	104°33'54.1816"W	8.38
6815.00	43.250	159.440	6573.50	551.77	-370.05	1318.31	3260164.00	1413415.14	40°27'52.0593"N	104°33'53.8803"W	8.41
6910.00	49.420	160.470	6639.06	618.97	-434.59	1341.83	3260187.51	1413350.61	40°27'51.4192"N	104°33'53.5849"W	6.54
7004.00	54.910	168.090	6696.75	692.45	-505.98	1361.73	3260207.42	1413279.22	40°27'50.7117"N	104°33'53.3372"W	8.66
7099.00	62.590	167.730	6746.00	773.41	-585.34	1378.74	3260224.43	1413199.87	40°27'49.9258"N	104°33'53.1280"W	8.09
7193.00	70.190	167.580	6783.62	859.24	-669.41	1397.14	3260242.83	1413115.79	40°27'49.0931"N	104°33'52.9014"W	8.09
7288.00	77.500	173.880	6810.06	950.35	-759.37	1411.73	3260257.42	1413025.84	40°27'48.2027"N	104°33'52.7249"W	9.99
7383.00	84.020	177.460	6825.31	1043.85	-852.81	1418.78	3260264.46	1412932.40	40°27'47.2788"N	104°33'52.6465"W	7.81
7477.00	90.030	180.300	6830.19	1136.98	-946.61	1420.61	3260266.29	1412838.61	40°27'46.3517"N	104°33'52.6356"W	7.07
7572.00	89.630	179.730	6830.47	1231.03	-1041.61	1420.58	3260266.27	1412743.61	40°27'45.4130"N	104°33'52.6489"W	0.73
7666.00	89.570	180.560	6831.12	1324.06	-1135.61	1420.34	3260266.03	1412649.62	40°27'44.4843"N	104°33'52.6648"W	0.89
7761.00	89.750	179.620	6831.69	1418.09	-1230.60	1420.19	3260265.88	1412554.62	40°27'43.5456"N	104°33'52.6797"W	1.01
7855.00	89.970	180.330	6831.92	1511.16	-1324.60	1420.23	3260265.92	1412460.63	40°27'42.6168"N	104°33'52.6920"W	0.79
7950.00	89.630	180.150	6832.25	1605.16	-1419.60	1419.84	3260265.52	1412365.63	40°27'41.6782"N	104°33'52.7101"W	0.40
8044.00	89.450	180.000	6833.00	1698.21	-1513.60	1419.71	3260265.40	1412271.64	40°27'40.7494"N	104°33'52.7246"W	0.25
8139.00	89.910	180.200	6833.54	1792.24	-1608.60	1419.55	3260265.23	1412176.65	40°27'39.8108"N	104°33'52.7397"W	0.53
8233.00	89.630	179.420	6833.91	1885.35	-1702.59	1419.86	3260265.55	1412082.65	40°27'38.8820"N	104°33'52.7485"W	0.88
8328.00	89.630	180.920	6834.53	1979.36	-1797.59	1419.58	3260265.26	1411987.66	40°27'37.9433"N	104°33'52.7651"W	1.58



Actual Wellpath Report

RAMPART A33-790 AWP

Page 5 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (183 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	89.320	181.170	6835.39	2072.16	-1891.57	1417.86	3260263.55	1411893.68	40°27'37.0149"N	104°33'52.8001"W	0.42
8517.00	89.570	178.480	6836.31	2166.25	-1986.56	1418.15	3260263.84	1411798.70	40°27'36.0763"N	104°33'52.8093"W	2.84
8612.00	88.860	178.140	6837.61	2260.64	-2081.50	1420.96	3260266.64	1411703.76	40°27'35.1378"N	104°33'52.7860"W	0.83
8706.00	89.080	178.300	6839.30	2354.06	-2175.44	1423.87	3260269.56	1411609.82	40°27'34.2093"N	104°33'52.7610"W	0.29
8801.00	89.200	178.400	6840.72	2448.45	-2270.39	1426.61	3260272.30	1411514.87	40°27'33.2708"N	104°33'52.7386"W	0.16
8896.00	89.290	179.170	6841.98	2542.76	-2365.36	1428.62	3260274.31	1411419.91	40°27'32.3322"N	104°33'52.7255"W	0.82
8990.00	89.350	178.590	6843.09	2636.06	-2459.34	1430.46	3260276.15	1411325.94	40°27'31.4035"N	104°33'52.7146"W	0.62
9085.00	90.030	179.730	6843.61	2730.30	-2554.32	1431.85	3260277.54	1411230.95	40°27'30.4648"N	104°33'52.7095"W	1.40
9179.00	89.540	178.960	6843.96	2823.51	-2648.32	1432.93	3260278.61	1411136.96	40°27'29.5359"N	104°33'52.7084"W	0.97
9274.00	89.780	178.880	6844.52	2917.80	-2743.30	1434.72	3260280.40	1411041.99	40°27'28.5972"N	104°33'52.6982"W	0.27
9368.00	89.510	179.480	6845.11	3011.04	-2837.29	1436.06	3260281.75	1410948.00	40°27'27.6684"N	104°33'52.6937"W	0.70
9463.00	89.970	180.000	6845.54	3105.15	-2932.28	1436.50	3260282.18	1410853.01	40°27'26.7297"N	104°33'52.7011"W	0.73
9557.00	90.430	179.750	6845.21	3198.25	-3026.28	1436.70	3260282.39	1410759.01	40°27'25.8008"N	104°33'52.7112"W	0.56
9652.00	90.710	180.270	6844.26	3292.30	-3121.28	1436.68	3260282.37	1410664.02	40°27'24.8622"N	104°33'52.7244"W	0.62
9746.00	89.850	179.010	6843.80	3385.44	-3215.27	1437.27	3260282.96	1410570.03	40°27'23.9334"N	104°33'52.7296"W	1.62
9841.00	89.940	177.850	6843.98	3479.82	-3310.23	1439.88	3260285.56	1410475.07	40°27'22.9948"N	104°33'52.7089"W	1.22
9936.00	90.250	176.730	6843.82	3574.41	-3405.13	1444.37	3260290.05	1410380.18	40°27'22.0567"N	104°33'52.6637"W	1.22
10030.00	89.020	178.250	6844.42	3667.95	-3499.03	1448.49	3260294.17	1410286.28	40°27'21.1284"N	104°33'52.6233"W	2.08
10125.00	90.280	179.720	6845.00	3762.23	-3594.01	1450.17	3260295.85	1410191.31	40°27'20.1897"N	104°33'52.6145"W	2.04
10219.00	90.250	179.770	6844.56	3855.35	-3688.01	1450.59	3260296.27	1410097.31	40°27'19.2609"N	104°33'52.6219"W	0.06
10314.00	90.220	179.980	6844.18	3949.43	-3783.01	1450.79	3260296.48	1410002.32	40°27'18.3222"N	104°33'52.6322"W	0.22
10408.00	90.250	180.730	6843.79	4042.41	-3877.00	1450.21	3260295.90	1409908.33	40°27'17.3935"N	104°33'52.6525"W	0.80
10503.00	90.150	179.380	6843.46	4136.45	-3972.00	1450.12	3260295.80	1409813.33	40°27'16.4548"N	104°33'52.6667"W	1.42
10598.00	88.800	179.490	6844.33	4230.63	-4066.99	1451.06	3260296.74	1409718.35	40°27'15.5161"N	104°33'52.6675"W	1.43
10692.00	89.420	179.320	6845.79	4323.82	-4160.97	1452.03	3260297.72	1409624.37	40°27'14.5874"N	104°33'52.6677"W	0.68
10787.00	89.660	178.990	6846.55	4418.06	-4255.96	1453.43	3260299.12	1409529.38	40°27'13.6487"N	104°33'52.6626"W	0.43
10881.00	89.970	179.490	6846.85	4511.29	-4349.95	1454.68	3260300.36	1409435.40	40°27'12.7198"N	104°33'52.6593"W	0.63
10975.00	89.910	178.800	6846.95	4604.54	-4443.94	1456.08	3260301.77	1409341.41	40°27'11.7910"N	104°33'52.6539"W	0.74
11070.00	89.970	179.540	6847.05	4698.78	-4538.93	1457.46	3260303.14	1409246.43	40°27'10.8522"N	104°33'52.6491"W	0.78
11165.00	89.780	179.440	6847.26	4792.95	-4633.92	1458.30	3260303.99	1409151.43	40°27'9.9135"N	104°33'52.6511"W	0.23



Actual Wellpath Report

RAMPART A33-790 AWP

Page 6 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (183 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	89.630	178.350	6847.74	4886.25	-4727.90	1460.12	3260305.80	1409057.46	40°27'8.9847"N	104°33'52.6405"W	1.17
11353.00	89.850	178.900	6848.17	4979.61	-4821.87	1462.37	3260308.06	1408963.49	40°27'8.0559"N	104°33'52.6242"W	0.63
11448.00	89.720	179.620	6848.53	5073.83	-4916.87	1463.60	3260309.28	1408868.50	40°27'7.1172"N	104°33'52.6212"W	0.77
11542.00	89.630	179.610	6849.06	5166.98	-5010.86	1464.23	3260309.92	1408774.51	40°27'6.1883"N	104°33'52.6259"W	0.10
11637.00	89.750	179.110	6849.57	5261.17	-5105.85	1465.29	3260310.98	1408679.52	40°27'5.2496"N	104°33'52.6251"W	0.54
11732.00	89.690	179.540	6850.04	5355.38	-5200.85	1466.41	3260312.10	1408584.53	40°27'4.3109"N	104°33'52.6236"W	0.46
11826.00	89.290	179.800	6850.87	5448.52	-5294.84	1466.95	3260312.64	1408490.54	40°27'3.3821"N	104°33'52.6294"W	0.51
11921.00	89.630	179.560	6851.77	5542.64	-5389.83	1467.48	3260313.17	1408395.55	40°27'2.4434"N	104°33'52.6355"W	0.44
12015.00	89.970	179.220	6852.10	5635.84	-5483.83	1468.48	3260314.17	1408301.56	40°27'1.5145"N	104°33'52.6354"W	0.51
12110.00	89.910	179.340	6852.20	5730.06	-5578.82	1469.68	3260315.36	1408206.57	40°27'0.5758"N	104°33'52.6329"W	0.14
12205.00	90.550	180.160	6851.82	5824.17	-5673.82	1470.09	3260315.78	1408111.58	40°26'59.6371"N	104°33'52.6405"W	1.09
12299.00	90.400	179.360	6851.04	5917.29	-5767.81	1470.49	3260316.17	1408017.59	40°26'58.7082"N	104°33'52.6483"W	0.87
12394.00	89.880	179.340	6850.81	6011.49	-5862.81	1471.56	3260317.25	1407922.60	40°26'57.7695"N	104°33'52.6473"W	0.55
12488.00	89.910	179.150	6850.98	6104.72	-5956.80	1472.80	3260318.49	1407828.61	40°26'56.8406"N	104°33'52.6441"W	0.20
12583.00	89.750	178.990	6851.26	6198.98	-6051.78	1474.34	3260320.03	1407733.63	40°26'55.9019"N	104°33'52.6371"W	0.24
12677.00	89.880	179.250	6851.56	6292.24	-6145.77	1475.79	3260321.47	1407639.64	40°26'54.9731"N	104°33'52.6313"W	0.31
12772.00	89.600	179.200	6851.99	6386.46	-6240.76	1477.07	3260322.76	1407544.65	40°26'54.0343"N	104°33'52.6276"W	0.30
12867.00	89.880	179.390	6852.42	6480.68	-6335.75	1478.24	3260323.93	1407449.67	40°26'53.0956"N	104°33'52.6255"W	0.36
12961.00	89.970	179.480	6852.55	6573.87	-6429.75	1479.17	3260324.85	1407355.67	40°26'52.1667"N	104°33'52.6263"W	0.14
13056.00	89.750	180.300	6852.78	6667.95	-6524.75	1479.35	3260325.04	1407260.68	40°26'51.2280"N	104°33'52.6369"W	0.89
13150.00	89.820	179.620	6853.13	6761.02	-6618.75	1479.42	3260325.10	1407166.68	40°26'50.2992"N	104°33'52.6489"W	0.73
13245.00	89.910	179.500	6853.36	6855.18	-6713.74	1480.15	3260325.83	1407071.69	40°26'49.3605"N	104°33'52.6524"W	0.16
13340.00	89.910	179.480	6853.51	6949.35	-6808.74	1480.99	3260326.68	1406976.70	40°26'48.4217"N	104°33'52.6544"W	0.02
13434.00	90.150	180.250	6853.46	7042.44	-6902.74	1481.21	3260326.90	1406882.70	40°26'47.4929"N	104°33'52.6644"W	0.86
13528.00	90.280	179.510	6853.10	7135.54	-6996.74	1481.41	3260327.09	1406788.71	40°26'46.5641"N	104°33'52.6747"W	0.80
13623.00	89.820	179.340	6853.02	7229.72	-7091.73	1482.36	3260328.05	1406693.72	40°26'45.6253"N	104°33'52.6753"W	0.52
13718.00	90.000	179.110	6853.17	7323.95	-7186.72	1483.65	3260329.33	1406598.73	40°26'44.6866"N	104°33'52.6716"W	0.31
13812.00	89.970	179.080	6853.19	7417.21	-7280.71	1485.13	3260330.82	1406504.75	40°26'43.7577"N	104°33'52.6652"W	0.05
13907.00	90.000	178.850	6853.22	7511.49	-7375.70	1486.85	3260332.53	1406409.76	40°26'42.8190"N	104°33'52.6560"W	0.24
14001.00	89.850	179.170	6853.34	7604.77	-7469.68	1488.47	3260334.16	1406315.78	40°26'41.8902"N	104°33'52.6478"W	0.38



Actual Wellpath Report

RAMPART A33-790 AWP

Page 7 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (183 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	89.970	179.590	6853.49	7698.97	-7564.68	1489.50	3260335.19	1406220.79	40°26'40.9514"N	104°33'52.6475"W	0.46
14190.00	90.220	179.900	6853.34	7792.09	-7658.68	1489.92	3260335.60	1406126.80	40°26'40.0226"N	104°33'52.6549"W	0.42
14285.00	90.000	179.610	6853.15	7886.20	-7753.67	1490.33	3260336.01	1406031.80	40°26'39.0838"N	104°33'52.6626"W	0.38
14379.00	90.280	179.870	6852.92	7979.33	-7847.67	1490.75	3260336.44	1405937.81	40°26'38.1550"N	104°33'52.6699"W	0.41
14474.00	89.940	179.160	6852.74	8073.49	-7942.67	1491.56	3260337.24	1405842.81	40°26'37.2163"N	104°33'52.6725"W	0.83
14568.00	90.030	179.510	6852.77	8166.71	-8036.66	1492.65	3260338.33	1405748.82	40°26'36.2874"N	104°33'52.6712"W	0.38
14663.00	89.750	179.910	6852.95	8260.83	-8131.66	1493.13	3260338.81	1405653.83	40°26'35.3487"N	104°33'52.6779"W	0.51
14757.00	89.880	179.280	6853.25	8353.98	-8225.66	1493.79	3260339.48	1405559.84	40°26'34.4198"N	104°33'52.6822"W	0.68
14852.00	89.970	179.340	6853.38	8448.19	-8320.65	1494.94	3260340.62	1405464.85	40°26'33.4811"N	104°33'52.6803"W	0.11
14946.00	90.060	178.700	6853.35	8541.47	-8414.64	1496.55	3260342.23	1405370.87	40°26'32.5522"N	104°33'52.6724"W	0.69
15041.00	90.090	179.610	6853.23	8635.71	-8509.62	1497.95	3260343.63	1405275.88	40°26'31.6135"N	104°33'52.6672"W	0.96
15135.00	90.060	179.280	6853.10	8728.90	-8603.62	1498.86	3260344.54	1405181.89	40°26'30.6846"N	104°33'52.6682"W	0.35
15230.00	89.940	178.890	6853.10	8823.16	-8698.61	1500.37	3260346.06	1405086.90	40°26'29.7459"N	104°33'52.6616"W	0.43
15324.00	91.020	178.760	6852.32	8916.47	-8792.58	1502.30	3260347.98	1404992.93	40°26'28.8171"N	104°33'52.6495"W	1.16
15419.00	90.000	178.440	6851.47	9010.82	-8887.55	1504.62	3260350.30	1404897.97	40°26'27.8785"N	104°33'52.6324"W	1.13
15514.00	89.780	179.380	6851.65	9105.11	-8982.53	1506.43	3260352.11	1404802.99	40°26'26.9398"N	104°33'52.6220"W	1.02
15608.00	89.450	178.550	6852.29	9198.40	-9076.51	1508.13	3260353.81	1404709.01	40°26'26.0110"N	104°33'52.6129"W	0.95
15703.00	89.720	178.740	6852.97	9292.74	-9171.48	1510.37	3260356.06	1404614.05	40°26'25.0723"N	104°33'52.5968"W	0.35
15798.00	90.520	179.080	6852.77	9387.03	-9266.46	1512.18	3260357.86	1404519.07	40°26'24.1336"N	104°33'52.5864"W	0.92
15892.00	89.910	180.870	6852.42	9480.10	-9360.46	1512.22	3260357.90	1404425.08	40°26'23.2049"N	104°33'52.5987"W	2.01
15986.00	90.060	180.440	6852.45	9573.01	-9454.45	1511.15	3260356.83	1404331.09	40°26'22.2762"N	104°33'52.6254"W	0.48
16081.00	89.850	180.270	6852.52	9666.98	-9549.45	1510.56	3260356.24	1404236.09	40°26'21.3376"N	104°33'52.6459"W	0.28
16176.00	89.630	180.420	6852.95	9760.95	-9644.45	1509.99	3260355.67	1404141.10	40°26'20.3990"N	104°33'52.6663"W	0.28
16270.00	90.340	180.870	6852.98	9853.86	-9738.44	1508.93	3260354.61	1404047.11	40°26'19.4704"N	104°33'52.6928"W	0.89
16365.00	89.940	180.920	6852.74	9947.70	-9833.43	1507.44	3260353.13	1403952.12	40°26'18.5319"N	104°33'52.7250"W	0.42
16459.00	89.750	180.660	6853.00	10040.57	-9927.42	1506.15	3260351.83	1403858.14	40°26'17.6033"N	104°33'52.7545"W	0.34
16553.00	89.630	180.870	6853.51	10133.45	-10021.41	1504.89	3260350.58	1403764.15	40°26'16.6748"N	104°33'52.7836"W	0.26
16648.00	90.030	181.020	6853.79	10227.28	-10116.40	1503.33	3260349.01	1403669.17	40°26'15.7364"N	104°33'52.8168"W	0.45
16743.00	90.220	180.180	6853.58	10321.19	-10211.39	1502.33	3260348.01	1403574.18	40°26'14.7978"N	104°33'52.8426"W	0.91
16837.00	89.850	179.360	6853.52	10414.30	-10305.39	1502.71	3260348.39	1403480.18	40°26'13.8690"N	104°33'52.8506"W	0.96



Actual Wellpath Report

RAMPART A33-790 AWP

Page 8 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (183 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]
16932.00	90.150	179.000	6853.52	10508.54	-10400.38	1504.07	3260349.75	1403385.20	40°26'12.9302"N	104°33'52.8459"W	0.49
17026.00	89.720	179.840	6853.63	10601.73	-10494.37	1505.02	3260350.70	1403291.21	40°26'12.0014"N	104°33'52.8465"W	1.00
17064.00‡	89.720	179.840	6853.82	10639.37	-10532.37	1505.13	3260350.81	1403253.21	40°26'11.6259"N	104°33'52.8503"W	0.00

HOLE & CASING SECTIONS - Ref Wellbore: RAMPART A33-790 AWB Ref Wellpath: RAMPART A33-790 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	1914.00	1884.00	30.00	1913.96	0.03	0.01	-1.80	-4.67



Actual Wellpath Report

RAMPART A33-790 AWP

Page 9 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-790
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350932
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A33-790 AWB
Slot	SLOT#14 RAMPART A33-790 (470'FSL & 1414'FEL,SEC.20)		

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	0.00	0.00	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	0.00	0.00	3258845.74	1413785.18	40°27'55.8528"N	104°34'10.8851"W	polygon
2D Polygon: dimensions not calculated								
RAMPART A33-790 TPZ REV-2(460'FNL & 0'FWL,SEC.28)	6829.00	-913.18	1418.59	3260264.27	1412872.04	40°27'46.6823"N	104°33'52.6572"W	point
RAMPART A33-790 TPZ REV-1(460'FNL & 0'FWL,SEC.28)	6844.00	-913.18	1418.59	3260264.27	1412872.04	40°27'46.6823"N	104°33'52.6572"W	point
RAMPART A33-790 BHL REV-1(460'FSL & 0'FWL,SEC.33)	6854.00	-10532.60	1496.04	3260341.72	1403252.99	40°26'11.6246"N	104°33'52.9679"W	point

WELLPATH COMPOSITION - Ref Wellbore: RAMPART A33-790 AWB Ref Wellpath: RAMPART A33-790 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1904.00	Gyrodata 2015 - GC+DROP+COND	Gyrodata 2015 - GC+DROP+COND 13-1/2" <80 - 1904>	RAMPART A33-790 AWB	9/7/2021
1904.00	17064.00	OWSG MWD rev2 (MS+IFR1)	OWSG MWD rev2 (MS+IFR1) 8-1/2" <1990 - 17026>	RAMPART A33-790 AWB	9/22/2021