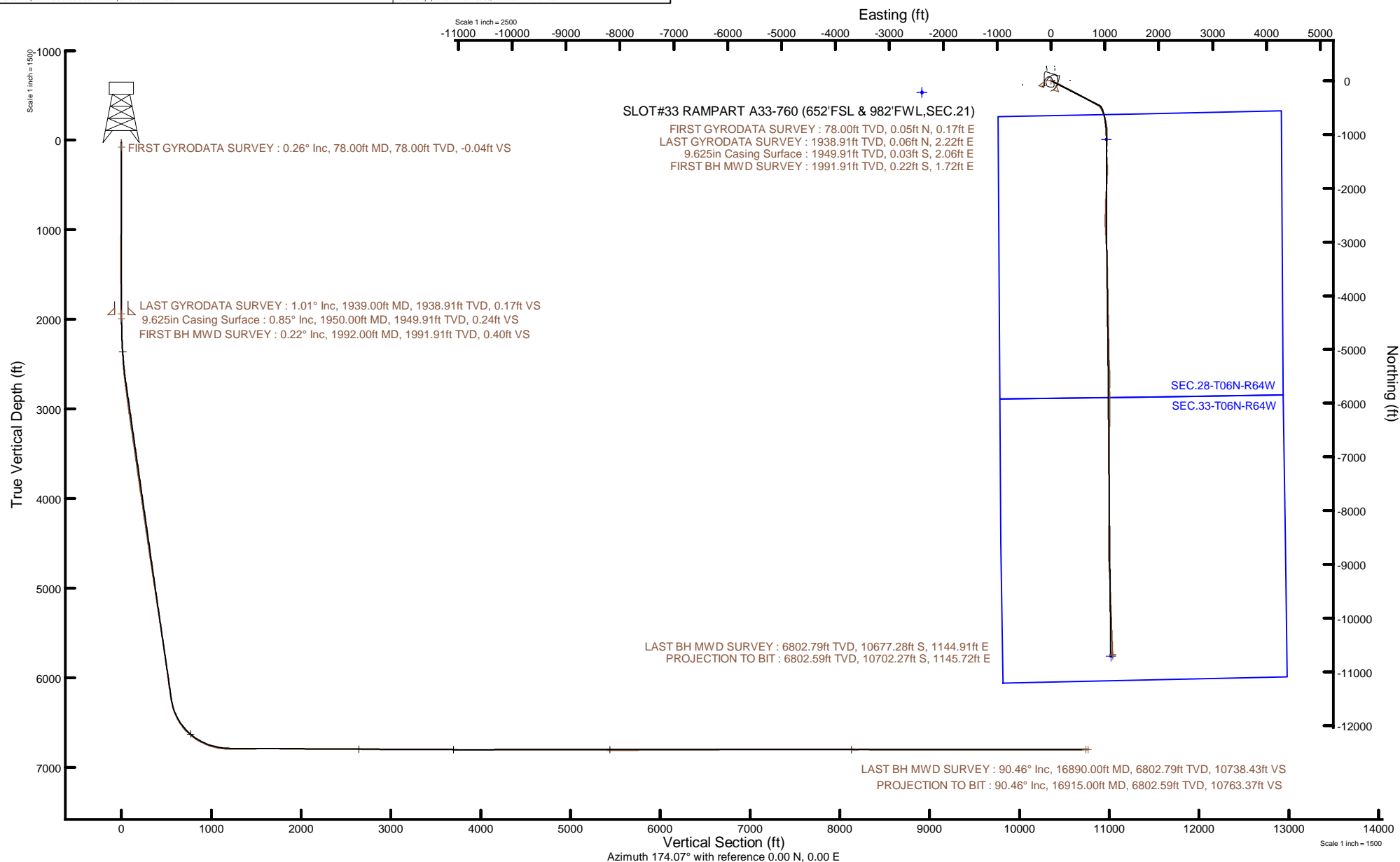


# NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)  
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: RAMPART A33-760  
Facility: SEC.21-T06N-R64W Wellbore: RAMPART A33-760 PWB



Plot reference wellpath is RAMPART A33-760 PWP Rev8.0	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: 4756 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: painsetr on 2021-08-09; Database: WellArchitectDB



### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Painsetr
Scale	0.999964	Report Generated	8/9/2021 at 10:30:04 AM
Convergence at slot	0.61° East	Database	WellArchitectDB

### WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-199.23	-66.45	3261240.31	1414003.66	40.4660451°	-104.5610764°
Facility Reference Pt			3261306.76	1414202.89	40.4665900°	-104.5608300°
Field Reference Pt			3000000.00	4454105.15	48.7761986°	-105.5000000°

### WELLPATH DATUM

Calculation method	Minimum curvature	H&P 517 (30') (RT) to Facility Vertical Datum	4756.00ft
Horizontal Reference Pt	Slot	H&P 517 (30') (RT) to Mean Sea Level	4756.00ft
Vertical Reference Pt	H&P 517 (30') (RT)	H&P 517 (30') (RT) to Ground Level at Slot (SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21))	4756.00ft
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	174.07°

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### WELLPATH DATA (180 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]	Comments
0.00	0.000	72.140	0.00	0.00	0.00	0.00	3261240.31	1414003.66	40.4660451	-104.5610764	0.00	
78.00	0.260	72.140	78.00	-0.04	0.05	0.17	3261240.48	1414003.71	40.4660452	-104.5610758	0.33	FIRST GYRODATA SURVEY
171.00	0.540	1.560	171.00	-0.51	0.56	0.38	3261240.69	1414004.22	40.4660466	-104.5610750	0.55	
262.00	0.290	273.750	262.00	-0.98	1.00	0.16	3261240.47	1414004.66	40.4660478	-104.5610758	0.66	
325.00	0.220	214.930	325.00	-0.91	0.91	-0.07	3261240.24	1414004.57	40.4660476	-104.5610766	0.41	
420.00	0.400	127.910	419.99	-0.55	0.56	0.09	3261240.40	1414004.22	40.4660466	-104.5610760	0.47	
514.00	0.450	345.020	513.99	-0.68	0.71	0.26	3261240.57	1414004.37	40.4660470	-104.5610754	0.86	
609.00	0.340	340.780	608.99	-1.33	1.34	0.07	3261240.38	1414005.00	40.4660488	-104.5610761	0.12	
703.00	0.640	316.990	702.99	-2.02	1.99	-0.38	3261239.93	1414005.65	40.4660506	-104.5610777	0.38	
798.00	0.540	352.800	797.98	-2.89	2.82	-0.80	3261239.51	1414006.48	40.4660529	-104.5610792	0.39	
892.00	0.480	341.070	891.98	-3.71	3.63	-0.99	3261239.33	1414007.29	40.4660551	-104.5610798	0.13	
987.00	0.280	13.070	986.98	-4.32	4.23	-1.06	3261239.25	1414007.89	40.4660567	-104.5610800	0.30	
1082.00	0.330	10.990	1081.98	-4.80	4.73	-0.96	3261239.35	1414008.39	40.4660581	-104.5610796	0.05	
1176.00	0.280	19.890	1175.97	-5.27	5.21	-0.83	3261239.48	1414008.87	40.4660594	-104.5610792	0.07	
1271.00	0.340	73.940	1270.97	-5.53	5.51	-0.48	3261239.83	1414009.17	40.4660602	-104.5610779	0.30	
1365.00	0.610	91.860	1364.97	-5.51	5.57	0.29	3261240.60	1414009.23	40.4660604	-104.5610751	0.32	
1460.00	0.440	100.000	1459.97	-5.34	5.49	1.16	3261241.47	1414009.15	40.4660601	-104.5610720	0.19	
1554.00	0.600	119.870	1553.96	-4.95	5.18	1.94	3261242.25	1414008.84	40.4660593	-104.5610692	0.25	
1649.00	0.940	138.680	1648.95	-4.03	4.35	2.88	3261243.19	1414008.01	40.4660569	-104.5610659	0.44	
1743.00	1.070	169.140	1742.94	-2.52	2.91	3.56	3261243.87	1414006.57	40.4660530	-104.5610635	0.58	
1838.00	0.960	202.840	1837.93	-0.94	1.30	3.42	3261243.73	1414004.96	40.4660486	-104.5610641	0.63	
1869.00	1.030	217.440	1868.92	-0.51	0.84	3.15	3261243.46	1414004.50	40.4660473	-104.5610650	0.85	
1939.00	1.010	242.410	1938.91	0.17	0.06	2.22	3261242.53	1414003.72	40.4660452	-104.5610684	0.63	LAST GYRODATA SURVEY
1992.00	0.220	234.250	1991.91	0.40	-0.22	1.72	3261242.03	1414003.44	40.4660444	-104.5610702	1.50	FIRST BH MWD SURVEY
2086.00	0.970	117.900	2085.90	0.93	-0.70	2.28	3261242.59	1414002.96	40.4660431	-104.5610682	1.15	
2181.00	3.710	117.020	2180.81	3.05	-2.47	5.73	3261246.04	1414001.19	40.4660381	-104.5610559	2.88	
2276.00	6.760	113.310	2275.41	7.45	-6.08	13.60	3261253.91	1413997.58	40.4660280	-104.5610277	3.23	
2370.00	5.940	116.990	2368.83	12.80	-10.48	23.02	3261263.33	1413993.18	40.4660157	-104.5609941	0.97	
2465.00	6.390	114.800	2463.28	18.17	-14.93	32.20	3261272.50	1413988.74	40.4660032	-104.5609613	0.53	
2559.00	8.570	114.960	2556.48	24.44	-20.08	43.30	3261283.60	1413983.58	40.4659887	-104.5609216	2.32	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### WELLPATH DATA (180 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]	Comments
2654.00	12.410	114.170	2649.87	33.20	-27.25	59.03	3261299.34	1413976.42	40.4659686	-104.5608653	4.04	
2749.00	14.800	114.090	2742.20	44.39	-36.38	79.42	3261319.73	1413967.28	40.4659429	-104.5607923	2.52	
2843.00	15.060	113.040	2833.02	56.31	-46.06	101.62	3261341.93	1413957.60	40.4659157	-104.5607129	0.40	
2937.00	14.640	114.970	2923.89	68.32	-55.85	123.63	3261363.93	1413947.81	40.4658882	-104.5606342	0.69	
3032.00	14.900	116.310	3015.75	81.00	-66.33	145.46	3261385.77	1413937.33	40.4658588	-104.5605562	0.45	
3127.00	14.980	117.460	3107.54	94.27	-77.41	167.30	3261407.61	1413926.25	40.4658278	-104.5604781	0.32	
3222.00	14.130	118.240	3199.49	107.54	-88.56	188.42	3261428.72	1413915.11	40.4657965	-104.5604027	0.92	
3316.00	14.710	118.180	3290.52	120.68	-99.62	209.04	3261449.35	1413904.04	40.4657656	-104.5603289	0.62	
3411.00	14.650	118.270	3382.42	134.20	-111.01	230.26	3261470.56	1413892.66	40.4657337	-104.5602531	0.07	
3506.00	14.250	117.020	3474.42	147.31	-122.01	251.25	3261491.55	1413881.65	40.4657029	-104.5601781	0.53	
3600.00	14.450	117.520	3565.48	160.06	-132.69	271.96	3261512.26	1413870.98	40.4656730	-104.5601041	0.25	
3695.00	14.890	116.390	3657.39	173.12	-143.59	293.41	3261533.70	1413860.08	40.4656425	-104.5600274	0.55	
3789.00	14.820	116.960	3748.25	186.11	-154.41	314.94	3261555.24	1413849.26	40.4656121	-104.5599505	0.17	
3884.00	14.610	117.650	3840.13	199.33	-165.47	336.38	3261576.68	1413838.19	40.4655811	-104.5598738	0.29	
3979.00	14.700	117.620	3932.04	212.62	-176.62	357.68	3261597.97	1413827.04	40.4655499	-104.5597977	0.10	
4074.00	14.640	117.410	4023.94	225.88	-187.74	379.01	3261619.31	1413815.93	40.4655188	-104.5597215	0.08	
4168.00	14.650	117.660	4114.89	238.98	-198.72	400.09	3261640.38	1413804.94	40.4654880	-104.5596462	0.07	
4263.00	14.680	117.950	4206.79	252.34	-209.94	421.36	3261661.65	1413793.72	40.4654566	-104.5595701	0.08	
4357.00	14.730	118.280	4297.71	265.70	-221.19	442.41	3261682.70	1413782.48	40.4654251	-104.5594949	0.10	
4452.00	14.710	117.990	4389.60	279.22	-232.57	463.69	3261703.98	1413771.10	40.4653933	-104.5594189	0.08	
4546.00	14.550	118.030	4480.55	292.47	-243.72	484.65	3261724.95	1413759.95	40.4653620	-104.5593440	0.17	
4641.00	14.830	118.410	4572.44	305.99	-255.11	505.88	3261746.17	1413748.56	40.4653302	-104.5592681	0.31	
4735.00	15.000	118.390	4663.28	319.64	-266.62	527.16	3261767.45	1413737.05	40.4652980	-104.5591921	0.18	
4830.00	15.230	118.040	4754.99	333.54	-278.33	548.99	3261789.28	1413725.34	40.4652652	-104.5591141	0.26	
4924.00	15.140	118.270	4845.71	347.34	-289.95	570.70	3261810.99	1413713.72	40.4652327	-104.5590365	0.12	
5019.00	14.960	118.390	4937.45	361.22	-301.66	592.41	3261832.70	1413702.02	40.4651999	-104.5589589	0.19	
5113.00	15.460	117.680	5028.16	375.00	-313.24	614.18	3261854.47	1413690.43	40.4651675	-104.5588811	0.57	
5207.00	15.520	117.910	5118.74	388.94	-324.95	636.39	3261876.68	1413678.72	40.4651347	-104.5588018	0.09	
5302.00	13.980	120.170	5210.61	402.78	-336.67	657.54	3261897.83	1413667.00	40.4651019	-104.5587262	1.73	
5397.00	14.490	119.750	5302.69	416.47	-348.33	677.78	3261918.07	1413655.34	40.4650693	-104.5586539	0.55	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### WELLPATH DATA (180 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]	Comments
5586.00	14.840	119.280	5485.53	444.21	-371.90	719.42	3261959.71	1413631.77	40.4650034	-104.5585052	0.20	
5681.00	14.830	119.150	5577.37	458.21	-383.77	740.65	3261980.93	1413619.90	40.4649702	-104.5584294	0.04	
5775.00	14.770	118.430	5668.25	471.89	-395.34	761.70	3262001.98	1413608.34	40.4649378	-104.5583542	0.21	
5870.00	14.870	118.970	5760.09	485.70	-407.01	783.01	3262023.29	1413596.67	40.4649052	-104.5582780	0.18	
5965.00	14.980	117.890	5851.88	499.51	-418.66	804.53	3262044.81	1413585.02	40.4648726	-104.5582011	0.31	
6059.00	14.830	119.000	5942.72	513.15	-430.17	825.79	3262066.06	1413573.51	40.4648404	-104.5581252	0.34	
6154.00	14.470	118.550	6034.63	526.83	-441.74	846.84	3262087.12	1413561.94	40.4648080	-104.5580500	0.40	
6248.00	13.630	119.050	6125.82	539.83	-452.73	866.84	3262107.12	1413550.95	40.4647772	-104.5579785	0.90	
6343.00	13.830	118.180	6218.11	552.62	-463.53	886.64	3262126.91	1413540.15	40.4647470	-104.5579078	0.30	
6437.00	14.680	140.390	6309.28	568.84	-478.02	904.15	3262144.42	1413525.66	40.4647067	-104.5578454	5.85	
6532.00	22.930	150.710	6399.15	595.90	-503.48	920.91	3262161.18	1413500.20	40.4646364	-104.5577861	9.33	
6626.00	31.730	154.030	6482.58	636.01	-541.75	940.73	3262181.01	1413461.93	40.4645307	-104.5577164	9.50	
6721.00	40.590	156.480	6559.21	689.05	-592.65	964.05	3262204.33	1413411.03	40.4643904	-104.5576345	9.45	
6815.00	49.080	160.760	6625.83	752.89	-654.35	988.01	3262228.28	1413349.33	40.4642203	-104.5575508	9.58	
6910.00	56.430	164.940	6683.30	827.02	-726.58	1010.16	3262250.43	1413277.11	40.4640214	-104.5574740	8.49	
7005.00	64.580	170.280	6730.06	909.08	-807.26	1027.72	3262267.99	1413196.43	40.4637995	-104.5574139	9.87	
7099.00	72.770	175.780	6764.24	996.52	-894.08	1038.22	3262278.49	1413109.62	40.4635609	-104.5573795	10.27	
7194.00	80.470	179.440	6786.21	1088.67	-986.33	1042.02	3262282.29	1413017.37	40.4633075	-104.5573694	8.93	
7288.00	89.720	182.630	6794.24	1181.52	-1079.86	1040.31	3262280.58	1412923.84	40.4630509	-104.5573791	10.40	
7383.00	89.850	181.190	6794.60	1275.63	-1174.80	1037.15	3262277.42	1412828.90	40.4627904	-104.5573941	1.52	
7478.00	90.740	179.690	6794.11	1370.04	-1269.79	1036.42	3262276.69	1412733.91	40.4625297	-104.5574003	1.84	
7572.00	90.250	180.590	6793.30	1463.51	-1363.79	1036.19	3262276.46	1412639.92	40.4622717	-104.5574047	1.09	
7667.00	90.460	177.250	6792.71	1558.16	-1458.76	1037.98	3262278.25	1412544.96	40.4620110	-104.5574019	3.52	
7761.00	89.880	175.500	6792.43	1652.07	-1552.56	1043.92	3262284.19	1412451.15	40.4617533	-104.5573842	1.96	
7856.00	89.450	180.090	6792.98	1746.85	-1647.47	1047.57	3262287.84	1412356.26	40.4614928	-104.5573747	4.85	
7951.00	89.320	181.950	6794.00	1841.14	-1742.44	1045.88	3262286.15	1412261.28	40.4612321	-104.5573844	1.96	
8045.00	89.450	183.840	6795.01	1934.02	-1836.31	1041.14	3262281.41	1412167.42	40.4609746	-104.5574050	2.02	
8140.00	89.570	181.990	6795.83	2027.88	-1931.18	1036.31	3262276.58	1412072.55	40.4607144	-104.5574260	1.95	
8235.00	89.690	184.300	6796.44	2121.68	-2026.03	1031.09	3262271.36	1411977.71	40.4604542	-104.5574483	2.43	
8330.00	89.600	184.240	6797.03	2215.18	-2120.77	1024.02	3262264.29	1411882.98	40.4601944	-104.5574774	0.11	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### WELLPATH DATA (180 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]	Comments
8424.00	90.060	181.880	6797.31	2308.02	-2214.62	1019.00	3262259.27	1411789.12	40.4599369	-104.5574990	2.56	
8518.00	90.310	182.190	6797.00	2401.11	-2308.56	1015.66	3262255.94	1411695.18	40.4596792	-104.5575146	0.42	
8612.00	89.480	181.370	6797.18	2494.26	-2402.52	1012.75	3262253.02	1411601.23	40.4594214	-104.5575287	1.24	
8707.00	89.780	180.190	6797.79	2588.61	-2497.50	1011.45	3262251.72	1411506.25	40.4591607	-104.5575369	1.28	
8801.00	89.780	180.570	6798.15	2682.04	-2591.50	1010.83	3262251.10	1411412.26	40.4589027	-104.5575428	0.40	
8896.00	89.540	179.350	6798.71	2776.53	-2686.50	1010.89	3262251.17	1411317.26	40.4586420	-104.5575462	1.31	
8990.00	89.820	176.400	6799.24	2870.31	-2780.42	1014.38	3262254.65	1411223.34	40.4583841	-104.5575372	3.15	
9085.00	89.690	176.800	6799.65	2965.22	-2875.25	1020.01	3262260.29	1411128.52	40.4581236	-104.5575206	0.44	
9180.00	89.410	177.210	6800.39	3060.09	-2970.12	1024.98	3262265.25	1411033.65	40.4578631	-104.5575064	0.52	
9274.00	89.570	177.200	6801.23	3153.95	-3064.00	1029.56	3262269.83	1410939.77	40.4576053	-104.5574935	0.17	
9369.00	90.180	175.780	6801.44	3248.86	-3158.82	1035.38	3262275.65	1410844.96	40.4573449	-104.5574762	1.63	
9464.00	89.630	177.220	6801.59	3343.77	-3253.64	1041.18	3262281.45	1410750.14	40.4570844	-104.5574590	1.62	
9558.00	90.400	179.400	6801.57	3437.51	-3347.60	1043.95	3262284.22	1410656.19	40.4568265	-104.5574526	2.46	
9653.00	89.570	179.690	6801.59	3532.08	-3442.59	1044.70	3262284.97	1410561.20	40.4565657	-104.5574535	0.93	
9748.00	89.410	179.600	6802.44	3626.62	-3537.59	1045.29	3262285.56	1410466.21	40.4563050	-104.5574551	0.19	
9842.00	89.570	178.430	6803.28	3720.27	-3631.57	1046.91	3262287.18	1410372.23	40.4560470	-104.5574528	1.26	
9937.00	90.180	178.900	6803.48	3814.96	-3726.54	1049.12	3262289.39	1410277.26	40.4557862	-104.5574485	0.81	
10031.00	89.380	178.420	6803.84	3908.66	-3820.51	1051.32	3262291.59	1410183.29	40.4555283	-104.5574442	0.99	
10126.00	89.260	178.620	6804.97	4003.37	-3915.47	1053.77	3262294.04	1410088.34	40.4552675	-104.5574390	0.25	
10220.00	89.510	178.880	6805.98	4097.05	-4009.45	1055.82	3262296.09	1409994.37	40.4550096	-104.5574352	0.38	
10315.00	90.220	179.180	6806.20	4191.69	-4104.43	1057.43	3262297.70	1409899.38	40.4547488	-104.5574331	0.81	
10410.00	90.490	178.610	6805.62	4286.35	-4199.41	1059.26	3262299.53	1409804.41	40.4544880	-104.5574301	0.66	
10504.00	90.520	179.430	6804.79	4380.00	-4293.39	1060.87	3262301.14	1409710.43	40.4542300	-104.5574280	0.87	
10599.00	89.660	179.610	6804.64	4474.57	-4388.39	1061.67	3262301.94	1409615.44	40.4539693	-104.5574287	0.92	
10694.00	89.510	178.640	6805.33	4569.20	-4483.37	1063.12	3262303.39	1409520.46	40.4537085	-104.5574271	1.03	
10788.00	90.030	179.180	6805.70	4662.86	-4577.36	1064.91	3262305.17	1409426.48	40.4534505	-104.5574243	0.80	
10883.00	89.600	178.730	6806.01	4757.51	-4672.34	1066.64	3262306.91	1409331.50	40.4531898	-104.5574217	0.66	
10977.00	89.940	178.650	6806.39	4851.21	-4766.31	1068.79	3262309.06	1409237.53	40.4529318	-104.5574176	0.37	
11072.00	90.090	179.010	6806.36	4945.88	-4861.29	1070.73	3262311.00	1409142.55	40.4526710	-104.5574142	0.41	
11166.00	89.690	179.050	6806.54	5039.53	-4955.28	1072.32	3262312.59	1409048.57	40.4524130	-104.5574121	0.43	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### WELLPATH DATA (180 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]	Comments
11261.00	89.970	179.030	6806.82	5134.17	-5050.27	1073.91	3262314.18	1408953.59	40.4521523	-104.5574100	0.30	
11356.00	89.880	178.300	6806.95	5228.86	-5145.24	1076.12	3262316.39	1408858.62	40.4518915	-104.5574057	0.77	
11450.00	89.540	177.520	6807.42	5322.65	-5239.17	1079.55	3262319.82	1408764.68	40.4516336	-104.5573970	0.91	
11544.00	89.350	176.660	6808.34	5416.52	-5333.05	1084.32	3262324.59	1408670.82	40.4513758	-104.5573834	0.94	
11639.00	89.910	178.430	6808.95	5511.34	-5427.95	1088.39	3262328.66	1408575.91	40.4511152	-104.5573724	1.95	
11734.00	89.720	181.290	6809.26	5605.84	-5522.94	1088.62	3262328.89	1408480.93	40.4508545	-104.5573752	3.02	
11828.00	90.800	180.290	6808.83	5699.19	-5616.93	1087.33	3262327.60	1408386.94	40.4505965	-104.5573834	1.57	
11923.00	90.370	180.690	6807.86	5793.59	-5711.92	1086.52	3262326.78	1408291.95	40.4503358	-104.5573900	0.62	
12018.00	90.000	178.930	6807.55	5888.11	-5806.92	1086.83	3262327.10	1408196.96	40.4500751	-104.5573925	1.89	
12112.00	90.650	179.640	6807.02	5981.72	-5900.91	1088.00	3262328.27	1408102.98	40.4498171	-104.5573919	1.02	
12206.00	90.550	179.620	6806.03	6075.27	-5994.90	1088.61	3262328.88	1408008.99	40.4495591	-104.5573933	0.11	
12301.00	90.490	179.120	6805.17	6169.86	-6089.89	1089.65	3262329.92	1407914.00	40.4492983	-104.5573931	0.53	
12490.00	90.150	180.920	6804.12	6357.83	-6278.88	1089.59	3262329.86	1407725.02	40.4487796	-104.5574006	0.97	
12585.00	90.120	181.200	6803.89	6452.13	-6373.86	1087.83	3262328.10	1407630.04	40.4485189	-104.5574105	0.30	
12680.00	90.280	181.190	6803.56	6546.39	-6468.84	1085.85	3262326.12	1407535.06	40.4482583	-104.5574213	0.17	
12774.00	90.220	181.150	6803.15	6639.67	-6562.82	1083.93	3262324.20	1407441.09	40.4480004	-104.5574318	0.08	
12868.00	90.650	180.060	6802.44	6733.06	-6656.81	1082.94	3262323.21	1407347.10	40.4477425	-104.5574389	1.25	
12963.00	90.550	180.090	6801.44	6827.53	-6751.81	1082.81	3262323.08	1407252.11	40.4474817	-104.5574430	0.11	
13058.00	90.650	180.500	6800.45	6921.97	-6846.80	1082.32	3262322.59	1407157.12	40.4472210	-104.5574484	0.44	
13153.00	89.750	180.720	6800.12	7016.35	-6941.79	1081.31	3262321.58	1407062.13	40.4469603	-104.5574557	0.98	
13247.00	89.780	180.530	6800.50	7109.73	-7035.79	1080.29	3262320.56	1406968.14	40.4467024	-104.5574629	0.20	
13436.00	89.850	179.830	6801.11	7297.66	-7224.78	1079.69	3262319.96	1406779.15	40.4461836	-104.5574723	0.37	
13531.00	89.780	179.950	6801.42	7392.17	-7319.78	1079.88	3262320.15	1406684.16	40.4459229	-104.5574752	0.15	
13626.00	89.910	179.600	6801.68	7486.70	-7414.78	1080.25	3262320.52	1406589.16	40.4456621	-104.5574775	0.39	
13720.00	89.880	179.700	6801.85	7580.25	-7508.78	1080.82	3262321.09	1406495.17	40.4454041	-104.5574791	0.11	
13815.00	90.400	179.440	6801.62	7674.81	-7603.78	1081.54	3262321.81	1406400.17	40.4451434	-104.5574801	0.61	
13909.00	90.150	179.330	6801.16	7768.41	-7697.77	1082.55	3262322.81	1406306.18	40.4448853	-104.5574801	0.29	
14004.00	89.410	180.130	6801.53	7862.94	-7792.77	1082.99	3262323.26	1406211.19	40.4446246	-104.5574821	1.15	
14098.00	90.030	181.270	6801.99	7956.31	-7886.76	1081.85	3262322.11	1406117.20	40.4443666	-104.5574898	1.38	
14193.00	89.410	181.140	6802.45	8050.58	-7981.73	1079.85	3262320.12	1406022.23	40.4441060	-104.5575006	0.67	

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### WELLPATH DATA (180 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]	Comments
14287.00	89.850	180.610	6803.06	8143.91	-8075.72	1078.41	3262318.68	1405928.25	40.4438481	-104.5575094	0.73	
14382.00	90.220	179.530	6803.00	8238.39	-8170.72	1078.30	3262318.56	1405833.25	40.4435874	-104.5575134	1.20	
14477.00	89.600	180.710	6803.15	8332.86	-8265.72	1078.10	3262318.37	1405738.26	40.4433266	-104.5575178	1.40	
14571.00	89.690	180.480	6803.73	8426.25	-8359.71	1077.12	3262317.39	1405644.27	40.4430687	-104.5575249	0.26	
14666.00	89.880	179.730	6804.09	8520.72	-8454.71	1076.95	3262317.22	1405549.27	40.4428079	-104.5575291	0.81	
14760.00	89.910	180.620	6804.26	8614.19	-8548.71	1076.66	3262316.93	1405455.28	40.4425499	-104.5575337	0.95	
14855.00	89.970	180.030	6804.36	8708.62	-8643.70	1076.12	3262316.39	1405360.29	40.4422892	-104.5575393	0.62	
14950.00	89.690	180.480	6804.64	8803.07	-8738.70	1075.70	3262315.97	1405265.29	40.4420285	-104.5575444	0.56	
15044.00	89.480	179.580	6805.32	8896.56	-8832.70	1075.65	3262315.92	1405171.30	40.4417705	-104.5575482	0.98	
15139.00	90.180	177.600	6805.61	8991.26	-8927.66	1077.99	3262318.26	1405076.34	40.4415098	-104.5575434	2.21	
15233.00	89.780	178.230	6805.64	9085.04	-9021.60	1081.41	3262321.68	1404982.40	40.4412518	-104.5575347	0.79	
15327.00	90.000	177.420	6805.82	9178.84	-9115.53	1084.97	3262325.24	1404888.47	40.4409939	-104.5575255	0.89	
15422.00	89.410	176.030	6806.31	9273.74	-9210.37	1090.40	3262330.67	1404793.64	40.4407334	-104.5575096	1.59	
15517.00	90.490	177.310	6806.39	9368.63	-9305.21	1095.92	3262336.19	1404698.80	40.4404730	-104.5574934	1.76	
15611.00	90.220	178.140	6805.81	9462.44	-9399.13	1099.65	3262339.92	1404604.89	40.4402151	-104.5574836	0.93	
15706.00	89.910	178.340	6805.70	9557.19	-9494.09	1102.57	3262342.84	1404509.93	40.4399544	-104.5574768	0.39	
15800.00	90.150	178.630	6805.65	9650.91	-9588.05	1105.05	3262345.32	1404415.97	40.4396964	-104.5574714	0.40	
15894.00	89.480	177.390	6805.96	9744.69	-9682.00	1108.32	3262348.58	1404322.03	40.4394384	-104.5574633	1.50	
15989.00	89.780	177.670	6806.57	9839.51	-9776.90	1112.41	3262352.68	1404227.13	40.4391778	-104.5574522	0.43	
16084.00	89.290	177.860	6807.34	9934.31	-9871.83	1116.12	3262356.38	1404132.21	40.4389172	-104.5574425	0.55	
16178.00	89.940	178.170	6807.97	10028.08	-9965.77	1119.37	3262359.64	1404038.27	40.4386592	-104.5574344	0.77	
16273.00	90.590	178.030	6807.53	10122.85	-10060.72	1122.52	3262362.79	1403943.33	40.4383985	-104.5574267	0.70	
16367.00	90.430	178.040	6806.70	10216.62	-10154.66	1125.74	3262366.01	1403849.39	40.4381406	-104.5574187	0.17	
16462.00	90.280	178.180	6806.11	10311.38	-10249.60	1128.88	3262369.14	1403754.45	40.4378799	-104.5574111	0.22	
16557.00	90.650	177.370	6805.34	10406.18	-10344.53	1132.57	3262372.83	1403659.53	40.4376193	-104.5574015	0.94	
16651.00	90.590	177.790	6804.32	10500.00	-10438.44	1136.53	3262376.80	1403565.62	40.4373614	-104.5573908	0.45	
16746.00	90.340	178.350	6803.55	10594.76	-10533.38	1139.73	3262380.00	1403470.68	40.4371007	-104.5573829	0.65	
16840.00	90.220	177.600	6803.09	10688.54	-10627.32	1143.06	3262383.32	1403376.74	40.4368428	-104.5573746	0.81	
16890.00	90.460	178.140	6802.79	10738.43	-10677.28	1144.91	3262385.18	1403326.78	40.4367056	-104.5573698	1.18	LAST BH MWD SURVEY
16915.00‡	90.460	178.140	6802.59	10763.37	-10702.27	1145.72	3262385.99	1403301.80	40.4366370	-104.5573679	0.00	PROJECTION TO BIT

### HOLE & CASING SECTIONS - Ref Wellbore: RAMPART A33-760 AWB Ref Wellpath: RAMPART A33-760 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	1950.00	1920.00	30.00	1949.91	0.01	0.02	-0.03	2.06

### TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.28-T06N-R64W	19.00	-218.49	-2394.66	3258845.74	1413785.18	40.4655147	-104.5696903	polygon
2D Polygon: dimensions not calculated								
SEC.33-T06N-R64W	19.00	-218.49	-2394.66	3258845.74	1413785.18	40.4655147	-104.5696903	polygon
2D Polygon: dimensions not calculated								
RAMPART A33-760 TPZ REV-2 (460'FNL & 2005'FWL,SEC.28)	6788.00	-1091.27	1028.79	3262269.06	1412912.43	40.4630199	-104.5574209	point
RAMPART A33-760 BHL REV-1 (460'FSL & 2011'FWL,SEC.33)	6803.00	-10704.56	1111.47	3262351.74	1403299.51	40.4366317	-104.5574910	point
RAMPART A33-760 TPZ REV-1 (460'FNL & 2005'FWL,SEC.28)	6803.00	-1091.27	1028.79	3262269.06	1412912.43	40.4630199	-104.5574209	point

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### WELLPATH COMPOSITION - Ref Wellbore: RAMPART A33-760 AWB Ref Wellpath: RAMPART A33-760 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1939.00	Gyrodatta 2015 - GC+DROP+COND	Gyrodatta 2015 - GC+DROP+COND 13-1/2" <78 - 1939>	RAMPART A33-760 AWB	8/2/2021
1939.00	16915.00	OWSG MWD rev2 (MS+IFR1)	OWSG MWD rev2 (MS+IFR1) 8-1/2" <1992 - 16890>	RAMPART A33-760 AWB	8/4/2021

### REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-760
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350926
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-760 AWB
Slot	SLOT#33 RAMPART A33-760 (652'FSL & 982'FWL,SEC.21)		

### WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
78.00	0.260	72.140	78.00	FIRST GYRODATA SURVEY
1939.00	1.010	242.410	1938.91	LAST GYRODATA SURVEY
1992.00	0.220	234.250	1991.91	FIRST BH MWD SURVEY
16890.00	90.460	178.140	6802.79	LAST BH MWD SURVEY
16915.00	90.460	178.140	6802.59	PROJECTION TO BIT