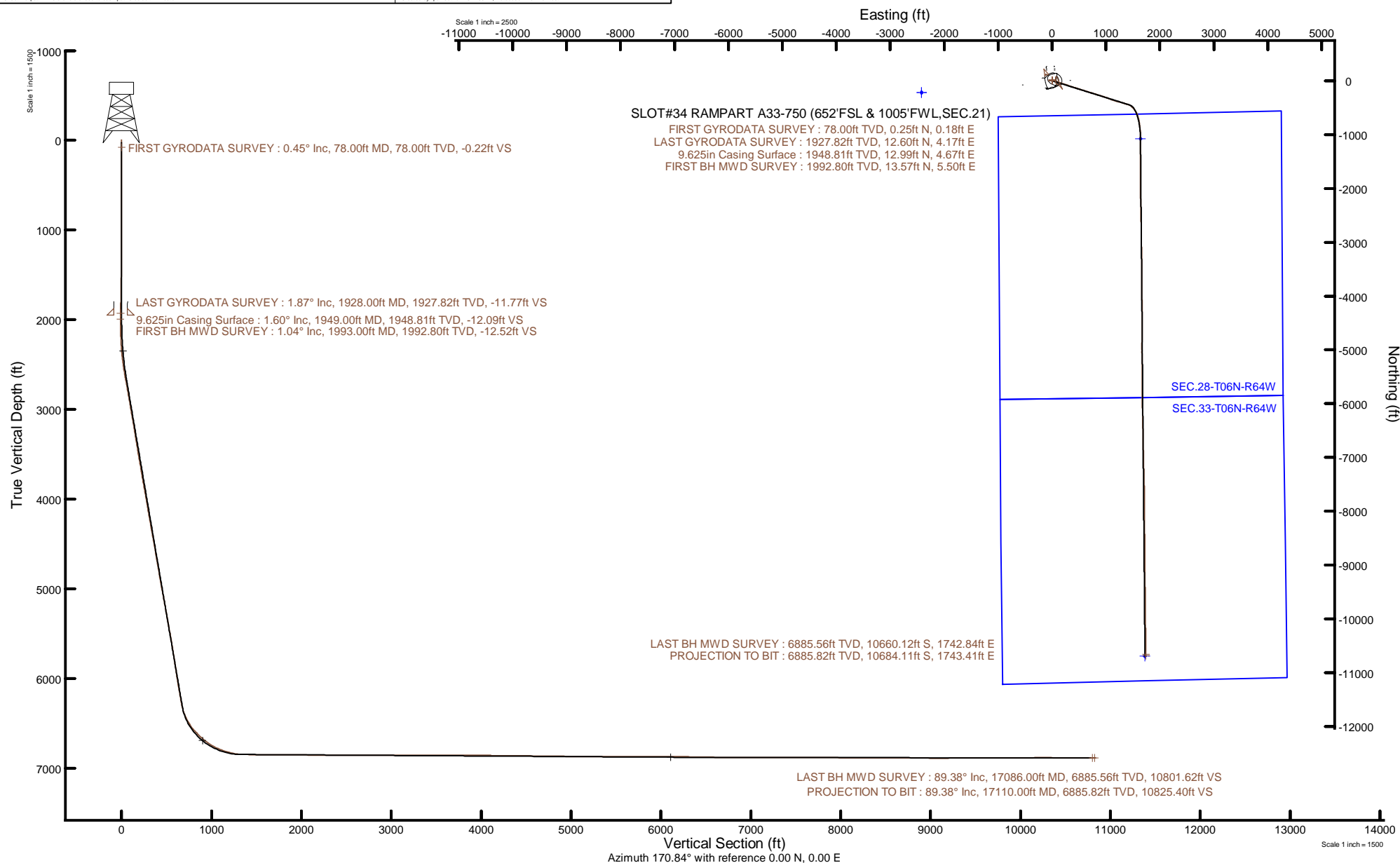


NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: RAMPART A33-750
Facility: SEC.21-T06N-R64W Wellbore: RAMPART A33-750 PWB



Plot reference wellpath is RAMPART A33-750 PWP RevA.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: 4757 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: painseir on 2021-08-17; Database: WellArchitectDB



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'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	8/17/2021 at 6:38:07 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	-199.06	-44.00	3261262.76	1414003.83	40.4660449°	-104.5609957°
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	4757.00ft
Horizontal Reference Pt	Slot	H&P 517 (30') (RT) to Mean Sea Level	4757.00ft
Vertical Reference Pt	H&P 517 (30') (RT)	H&P 517 (30') (RT) to Ground Level at Slot (SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21))	4757.00ft
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	170.84°

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH DATA (181 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	36.150	0.00	0.00	0.00	0.00	3261262.76	1414003.83	40.4660449	-104.5609957	0.00	
78.00	0.450	36.150	78.00	-0.22	0.25	0.18	3261262.94	1414004.08	40.4660456	-104.5609950	0.58	FIRST GYRODATA SURVEY
171.00	0.720	64.720	170.99	-0.63	0.79	0.92	3261263.68	1414004.62	40.4660471	-104.5609923	0.42	
262.00	0.640	61.690	261.99	-0.96	1.28	1.89	3261264.65	1414005.11	40.4660484	-104.5609889	0.10	
325.00	0.740	55.880	324.98	-1.25	1.67	2.54	3261265.30	1414005.50	40.4660494	-104.5609865	0.19	
420.00	0.550	30.370	419.98	-1.86	2.41	3.27	3261266.03	1414006.24	40.4660514	-104.5609838	0.36	
514.00	0.460	65.810	513.97	-2.30	2.95	3.85	3261266.61	1414006.78	40.4660529	-104.5609818	0.34	
609.00	0.290	98.200	608.97	-2.33	3.08	4.43	3261267.19	1414006.91	40.4660532	-104.5609797	0.28	
703.00	0.370	268.010	702.97	-2.30	3.03	4.36	3261267.12	1414006.86	40.4660531	-104.5609799	0.70	
798.00	0.330	217.350	797.97	-2.15	2.80	3.89	3261266.65	1414006.63	40.4660525	-104.5609816	0.32	
892.00	0.380	212.160	891.97	-1.73	2.32	3.56	3261266.32	1414006.15	40.4660512	-104.5609828	0.06	
987.00	0.400	285.000	986.97	-1.63	2.14	3.07	3261265.83	1414005.97	40.4660507	-104.5609846	0.49	
1082.00	0.570	276.660	1081.96	-1.89	2.28	2.28	3261265.04	1414006.11	40.4660511	-104.5609874	0.19	
1176.00	0.380	272.000	1175.96	-2.08	2.35	1.51	3261264.27	1414006.18	40.4660513	-104.5609902	0.21	
1271.00	0.480	310.190	1270.96	-2.44	2.62	0.89	3261263.65	1414006.45	40.4660521	-104.5609924	0.31	
1365.00	0.580	309.530	1364.95	-3.10	3.17	0.22	3261262.98	1414007.00	40.4660536	-104.5609948	0.11	
1460.00	0.540	343.650	1459.95	-3.90	3.91	-0.28	3261262.48	1414007.74	40.4660556	-104.5609965	0.35	
1554.00	0.800	351.370	1553.94	-5.00	4.98	-0.50	3261262.26	1414008.81	40.4660586	-104.5609973	0.29	
1649.00	1.230	12.230	1648.93	-6.61	6.63	-0.38	3261262.38	1414010.46	40.4660631	-104.5609968	0.59	
1743.00	1.470	30.840	1742.90	-8.47	8.66	0.45	3261263.21	1414012.49	40.4660686	-104.5609938	0.53	
1838.00	1.720	45.040	1837.87	-10.24	10.71	2.08	3261264.84	1414014.54	40.4660742	-104.5609878	0.49	
1928.00	1.870	50.520	1927.82	-11.77	12.60	4.17	3261266.93	1414016.43	40.4660794	-104.5609802	0.25	LAST GYRODATA SURVEY
1993.00	1.040	59.810	1992.80	-12.52	13.57	5.50	3261268.26	1414017.40	40.4660820	-104.5609754	1.32	FIRST BH MWD SURVEY
2087.00	1.400	113.860	2086.78	-12.20	13.53	7.29	3261270.05	1414017.36	40.4660818	-104.5609690	1.23	
2182.00	3.660	111.520	2181.68	-10.02	11.95	11.17	3261273.93	1414015.78	40.4660774	-104.5609551	2.38	
2277.00	6.160	111.500	2276.33	-5.87	8.97	18.74	3261281.49	1414012.80	40.4660690	-104.5609280	2.63	
2371.00	10.180	111.770	2369.35	0.97	4.04	31.15	3261293.91	1414007.87	40.4660551	-104.5608836	4.28	
2466.00	14.420	111.140	2462.15	11.26	-3.34	49.99	3261312.74	1414000.49	40.4660343	-104.5608162	4.47	
2560.00	18.250	110.920	2552.34	24.55	-12.82	74.66	3261337.42	1413991.01	40.4660075	-104.5607279	4.07	
2655.00	21.050	109.620	2641.80	40.22	-23.87	104.63	3261367.39	1413979.96	40.4659764	-104.5606206	2.98	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH DATA (181 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
2750.00	20.330	108.670	2730.67	56.14	-34.88	136.34	3261399.09	1413968.95	40.4659452	-104.5605071	0.84	
2844.00	21.050	108.120	2818.61	71.50	-45.36	167.85	3261430.60	1413958.48	40.4659155	-104.5603942	0.79	
2939.00	21.150	107.150	2907.24	86.91	-55.72	200.44	3261463.19	1413948.12	40.4658862	-104.5602775	0.38	
3033.00	20.200	108.530	2995.19	101.97	-65.87	232.04	3261494.79	1413937.96	40.4658574	-104.5601643	1.14	
3128.00	21.150	106.420	3084.07	117.00	-75.93	264.03	3261526.78	1413927.90	40.4658288	-104.5600498	1.27	
3223.00	20.790	109.130	3172.78	132.39	-86.30	296.40	3261559.15	1413917.53	40.4657994	-104.5599338	1.09	
3318.00	18.950	109.050	3262.12	147.67	-96.86	326.91	3261589.66	1413906.97	40.4657695	-104.5598246	1.94	
3412.00	18.810	108.480	3351.06	161.92	-106.65	355.71	3261618.45	1413897.19	40.4657418	-104.5597215	0.25	
3601.00	20.760	107.550	3528.90	191.11	-126.41	416.55	3261679.29	1413877.43	40.4656858	-104.5595036	1.05	
3696.00	21.070	107.380	3617.64	206.31	-136.59	448.90	3261711.64	1413867.25	40.4656570	-104.5593877	0.33	
3790.00	21.180	107.610	3705.32	221.51	-146.77	481.21	3261743.95	1413857.06	40.4656281	-104.5592720	0.15	
3885.00	21.240	107.700	3793.88	237.01	-157.19	513.96	3261776.70	1413846.64	40.4655985	-104.5591547	0.07	
3980.00	21.500	107.160	3882.35	252.50	-167.56	546.99	3261809.73	1413836.27	40.4655691	-104.5590364	0.34	
4075.00	21.400	107.370	3970.77	267.96	-177.87	580.16	3261842.90	1413825.96	40.4655398	-104.5589176	0.13	
4169.00	21.310	107.470	4058.32	283.28	-188.12	612.82	3261875.56	1413815.72	40.4655107	-104.5588006	0.10	
4264.00	21.290	107.440	4146.83	298.74	-198.47	645.74	3261908.48	1413805.37	40.4654814	-104.5586827	0.02	
4358.00	21.460	107.430	4234.36	314.08	-208.74	678.43	3261941.16	1413795.10	40.4654522	-104.5585656	0.18	
4453.00	21.400	107.150	4322.80	329.54	-219.05	711.57	3261974.30	1413784.79	40.4654230	-104.5584469	0.12	
4547.00	21.580	107.250	4410.26	344.83	-229.24	744.47	3262007.20	1413774.60	40.4653940	-104.5583291	0.20	
4642.00	21.310	107.770	4498.68	360.42	-239.69	777.59	3262040.32	1413764.15	40.4653644	-104.5582104	0.35	
4736.00	21.110	107.230	4586.32	375.68	-249.91	810.02	3262072.75	1413753.93	40.4653354	-104.5580943	0.30	
4925.00	21.440	106.870	4762.44	405.96	-270.02	875.59	3262138.31	1413733.82	40.4652783	-104.5578594	0.19	
5020.00	21.150	107.510	4850.95	421.28	-280.21	908.55	3262171.27	1413723.63	40.4652493	-104.5577414	0.39	
5114.00	20.790	108.470	4938.72	436.62	-290.60	940.54	3262203.27	1413713.24	40.4652199	-104.5576268	0.53	
5208.00	22.090	108.620	5026.22	452.60	-301.53	973.12	3262235.84	1413702.31	40.4651890	-104.5575101	1.38	
5303.00	21.920	108.460	5114.30	469.15	-312.85	1006.86	3262269.59	1413690.99	40.4651569	-104.5573893	0.19	
5398.00	18.990	111.460	5203.30	485.24	-324.12	1038.08	3262300.80	1413679.72	40.4651251	-104.5572776	3.27	
5493.00	18.640	112.920	5293.22	501.18	-335.69	1066.45	3262329.17	1413668.16	40.4650925	-104.5571760	0.62	
5587.00	19.500	111.110	5382.06	517.07	-347.19	1094.92	3262357.64	1413656.65	40.4650601	-104.5570742	1.11	
5682.00	20.810	110.000	5471.25	533.28	-358.67	1125.57	3262388.29	1413645.17	40.4650277	-104.5569645	1.44	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH DATA (181 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
5777.00	21.580	106.870	5559.82	549.17	-369.51	1158.15	3262420.86	1413634.33	40.4649970	-104.5568478	1.44	
5871.00	20.910	106.320	5647.43	563.98	-379.24	1190.79	3262453.50	1413624.60	40.4649693	-104.5567309	0.74	
5966.00	21.350	103.790	5736.05	578.01	-388.13	1223.85	3262486.57	1413615.71	40.4649439	-104.5566124	1.07	
6060.00	20.740	104.300	5823.78	591.31	-396.32	1256.60	3262519.31	1413607.53	40.4649205	-104.5564950	0.68	
6155.00	20.200	105.040	5912.78	604.73	-404.73	1288.74	3262551.45	1413599.11	40.4648965	-104.5563798	0.63	
6249.00	19.560	107.590	6001.18	618.47	-413.70	1319.41	3262582.12	1413590.15	40.4648710	-104.5562700	1.15	
6344.00	21.140	107.070	6090.25	633.20	-423.53	1350.95	3262613.66	1413580.31	40.4648431	-104.5561570	1.67	
6439.00	21.510	107.420	6178.74	648.56	-433.78	1383.95	3262646.65	1413570.07	40.4648140	-104.5560388	0.41	
6533.00	21.620	107.160	6266.16	663.95	-444.04	1416.93	3262679.64	1413559.80	40.4647848	-104.5559207	0.16	
6628.00	24.440	120.580	6353.64	684.29	-459.22	1450.61	3262713.31	1413544.63	40.4647422	-104.5558002	6.26	
6722.00	30.020	134.580	6437.28	715.74	-485.66	1484.16	3262746.86	1413518.18	40.4646686	-104.5556807	9.00	
6817.00	37.770	140.650	6516.10	760.13	-524.91	1519.59	3262782.30	1413478.94	40.4645599	-104.5555548	8.89	
6911.00	44.120	147.880	6587.10	815.23	-574.97	1555.30	3262818.00	1413428.89	40.4644214	-104.5554284	8.42	
7006.00	47.550	159.490	6653.40	880.18	-635.92	1585.22	3262847.92	1413367.93	40.4642533	-104.5553232	9.47	
7100.00	54.760	167.320	6712.37	952.66	-706.01	1605.85	3262868.55	1413297.84	40.4640603	-104.5552518	10.04	
7195.00	62.160	171.140	6762.04	1033.51	-785.50	1620.86	3262883.56	1413218.36	40.4638417	-104.5552009	8.51	
7289.00	68.960	174.380	6800.92	1118.97	-870.33	1631.57	3262894.27	1413133.53	40.4636085	-104.5551657	7.88	
7384.00	76.960	177.410	6828.74	1209.36	-960.85	1638.01	3262900.71	1413043.02	40.4633599	-104.5551460	8.96	
7479.00	85.070	180.370	6843.57	1302.18	-1054.58	1639.80	3262902.50	1412949.29	40.4631026	-104.5551431	9.07	
7573.00	89.540	179.820	6847.99	1394.83	-1148.45	1639.65	3262902.35	1412855.42	40.4628449	-104.5551473	4.79	
7668.00	88.830	179.830	6849.34	1488.65	-1243.44	1639.94	3262902.64	1412760.44	40.4625842	-104.5551499	0.75	
7762.00	89.880	180.210	6850.40	1581.44	-1337.43	1639.91	3262902.60	1412666.45	40.4623262	-104.5551536	1.19	
7857.00	89.290	179.430	6851.09	1675.27	-1432.43	1640.20	3262902.90	1412571.46	40.4620655	-104.5551562	1.03	
7952.00	89.690	180.270	6851.93	1769.10	-1527.42	1640.45	3262903.15	1412476.47	40.4618047	-104.5551589	0.98	
8046.00	89.630	179.970	6852.49	1861.86	-1621.42	1640.26	3262902.95	1412382.47	40.4615467	-104.5551632	0.33	
8141.00	89.940	180.150	6852.85	1955.64	-1716.42	1640.16	3262902.85	1412287.48	40.4612860	-104.5551672	0.38	
8236.00	89.780	180.560	6853.08	2049.33	-1811.42	1639.57	3262902.27	1412192.48	40.4610253	-104.5551730	0.46	
8331.00	89.910	180.370	6853.34	2142.99	-1906.41	1638.80	3262901.49	1412097.49	40.4607646	-104.5551794	0.24	
8425.00	89.820	180.050	6853.56	2235.74	-2000.41	1638.45	3262901.15	1412003.49	40.4605066	-104.5551842	0.35	
8519.00	89.780	178.850	6853.89	2328.67	-2094.41	1639.35	3262902.05	1411909.50	40.4602486	-104.5551846	1.28	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH DATA (181 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
8613.00	89.750	176.150	6854.27	2422.03	-2188.31	1643.45	3262906.15	1411815.61	40.4599907	-104.5551734	2.87	
8708.00	90.280	179.580	6854.25	2516.30	-2283.23	1646.99	3262909.69	1411720.69	40.4597301	-104.5551643	3.65	
8803.00	89.690	178.510	6854.27	2610.33	-2378.21	1648.58	3262911.27	1411625.71	40.4594693	-104.5551623	1.29	
8897.00	89.880	179.440	6854.62	2703.38	-2472.19	1650.26	3262912.96	1411531.73	40.4592113	-104.5551598	1.01	
8992.00	89.720	179.310	6854.96	2797.33	-2567.19	1651.29	3262913.99	1411436.74	40.4589506	-104.5551598	0.22	
9086.00	89.880	178.440	6855.28	2890.40	-2661.17	1653.14	3262915.84	1411342.76	40.4586926	-104.5551567	0.94	
9181.00	89.630	179.210	6855.69	2984.48	-2756.15	1655.09	3262917.78	1411247.79	40.4584318	-104.5551534	0.85	
9275.00	89.450	178.780	6856.45	3077.53	-2850.13	1656.74	3262919.43	1411153.81	40.4581738	-104.5551510	0.50	
9370.00	89.910	179.590	6856.98	3171.52	-2945.12	1658.09	3262920.78	1411058.83	40.4579131	-104.5551498	0.98	
9465.00	89.940	178.630	6857.10	3265.53	-3040.10	1659.56	3262922.26	1410963.84	40.4576523	-104.5551482	1.01	
9559.00	90.740	179.240	6856.54	3358.59	-3134.08	1661.31	3262924.01	1410869.86	40.4573943	-104.5551455	1.07	
9654.00	89.540	179.330	6856.31	3452.56	-3229.08	1662.50	3262925.19	1410774.88	40.4571335	-104.5551449	1.27	
9749.00	89.230	179.160	6857.33	3546.53	-3324.06	1663.75	3262926.44	1410679.90	40.4568728	-104.5551440	0.37	
9843.00	90.150	179.630	6857.84	3639.48	-3418.05	1664.74	3262927.44	1410585.91	40.4566148	-104.5551440	1.10	
9938.00	90.060	179.870	6857.66	3733.34	-3513.05	1665.15	3262927.85	1410490.91	40.4563540	-104.5551462	0.27	
10032.00	90.000	179.950	6857.62	3826.16	-3607.05	1665.30	3262928.00	1410396.92	40.4560960	-104.5551492	0.11	
10127.00	90.430	179.900	6857.26	3919.97	-3702.05	1665.43	3262928.12	1410301.92	40.4558353	-104.5551524	0.46	
10221.00	89.880	179.280	6857.00	4012.87	-3796.05	1666.10	3262928.80	1410207.93	40.4555773	-104.5551536	0.88	
10316.00	88.890	179.060	6858.02	4106.86	-3891.03	1667.48	3262930.17	1410112.95	40.4553165	-104.5551523	1.07	
10411.00	88.980	179.850	6859.79	4200.78	-3986.01	1668.38	3262931.08	1410017.97	40.4550558	-104.5551527	0.84	
10505.00	90.030	179.640	6860.60	4293.64	-4080.00	1668.80	3262931.49	1409923.98	40.4547978	-104.5551548	1.14	
10600.00	89.350	179.770	6861.12	4387.50	-4175.00	1669.29	3262931.98	1409828.99	40.4545370	-104.5551567	0.73	
10695.00	89.320	179.800	6862.22	4481.34	-4269.99	1669.64	3262932.34	1409734.00	40.4542763	-104.5551590	0.04	
10789.00	89.140	179.900	6863.48	4574.17	-4363.98	1669.89	3262932.59	1409640.01	40.4540183	-104.5551617	0.22	
10884.00	89.510	180.660	6864.60	4667.88	-4458.98	1669.42	3262932.12	1409545.02	40.4537576	-104.5551670	0.89	
10979.00	89.820	179.270	6865.16	4761.67	-4553.97	1669.48	3262932.18	1409450.03	40.4534969	-104.5551705	1.50	
11073.00	88.550	180.730	6866.49	4854.46	-4647.96	1669.48	3262932.18	1409356.05	40.4532389	-104.5551741	2.06	
11167.00	88.980	179.860	6868.52	4947.16	-4741.93	1669.00	3262931.70	1409262.08	40.4529810	-104.5551794	1.03	
11262.00	89.820	180.290	6869.51	5040.92	-4836.93	1668.87	3262931.57	1409167.09	40.4527202	-104.5551835	0.99	
11357.00	89.780	179.910	6869.85	5134.68	-4931.93	1668.71	3262931.41	1409072.09	40.4524595	-104.5551877	0.40	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH DATA (181 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
11451.00	89.820	180.020	6870.17	5227.49	-5025.93	1668.77	3262931.46	1408978.10	40.4522015	-104.5551911	0.12	
11546.00	89.780	179.890	6870.51	5321.29	-5120.93	1668.84	3262931.54	1408883.10	40.4519408	-104.5551945	0.14	
11640.00	89.780	179.800	6870.87	5414.13	-5214.92	1669.10	3262931.79	1408789.10	40.4516827	-104.5551972	0.10	
11735.00	89.820	179.650	6871.20	5507.99	-5309.92	1669.55	3262932.25	1408694.11	40.4514220	-104.5551992	0.16	
11830.00	89.750	179.620	6871.56	5601.87	-5404.92	1670.16	3262932.85	1408599.12	40.4511612	-104.5552006	0.08	
11924.00	89.880	179.450	6871.86	5694.79	-5498.92	1670.92	3262933.62	1408505.12	40.4509032	-104.5552015	0.23	
12019.00	89.850	179.650	6872.08	5788.70	-5593.91	1671.67	3262934.36	1408410.13	40.4506425	-104.5552024	0.21	
12113.00	89.940	179.070	6872.25	5881.66	-5687.91	1672.72	3262935.41	1408316.14	40.4503844	-104.5552023	0.62	
12207.00	90.030	179.700	6872.28	5974.61	-5781.90	1673.72	3262936.42	1408222.15	40.4501264	-104.5552022	0.68	
12302.00	90.180	179.370	6872.11	6068.52	-5876.90	1674.50	3262937.19	1408127.16	40.4498657	-104.5552031	0.38	
12397.00	90.150	179.230	6871.83	6162.49	-5971.89	1675.66	3262938.35	1408032.17	40.4496049	-104.5552026	0.15	
12491.00	89.290	179.250	6872.29	6255.48	-6065.88	1676.90	3262939.60	1407938.18	40.4493469	-104.5552017	0.92	
12586.00	89.320	178.940	6873.44	6349.49	-6160.86	1678.40	3262941.10	1407843.20	40.4490861	-104.5551999	0.33	
12681.00	88.800	178.750	6875.00	6443.55	-6255.83	1680.32	3262943.01	1407748.24	40.4488254	-104.5551967	0.58	
12775.00	88.550	178.370	6877.18	6536.67	-6349.77	1682.68	3262945.38	1407654.30	40.4485675	-104.5551918	0.48	
12869.00	89.940	178.870	6878.41	6629.79	-6443.73	1684.94	3262947.64	1407560.34	40.4483095	-104.5551873	1.57	
12964.00	89.910	179.120	6878.54	6723.83	-6538.72	1686.61	3262949.30	1407465.36	40.4480488	-104.5551849	0.27	
13059.00	90.180	178.760	6878.46	6817.89	-6633.70	1688.37	3262951.06	1407370.38	40.4477880	-104.5551822	0.47	
13154.00	90.030	178.680	6878.29	6911.99	-6728.68	1690.49	3262953.18	1407275.41	40.4475273	-104.5551783	0.18	
13248.00	89.910	178.440	6878.34	7005.14	-6822.65	1692.85	3262955.55	1407181.44	40.4472693	-104.5551734	0.29	
13343.00	89.540	178.840	6878.79	7099.26	-6917.62	1695.11	3262957.80	1407086.47	40.4470086	-104.5551689	0.57	
13437.00	89.660	178.430	6879.45	7192.38	-7011.59	1697.34	3262960.04	1406992.50	40.4467506	-104.5551645	0.45	
13532.00	90.550	178.830	6879.28	7286.51	-7106.56	1699.62	3262962.31	1406897.54	40.4464898	-104.5551599	1.03	
13627.00	89.290	178.300	6879.41	7380.64	-7201.53	1701.99	3262964.69	1406802.57	40.4462291	-104.5551550	1.44	
13721.00	90.180	178.240	6879.84	7473.85	-7295.49	1704.83	3262967.53	1406708.62	40.4459711	-104.5551484	0.95	
13816.00	89.510	178.390	6880.10	7568.04	-7390.45	1707.63	3262970.32	1406613.67	40.4457104	-104.5551420	0.72	
13910.00	89.380	179.150	6881.01	7661.14	-7484.42	1709.64	3262972.34	1406519.70	40.4454524	-104.5551384	0.82	
14005.00	89.630	178.890	6881.83	7755.17	-7579.40	1711.27	3262973.96	1406424.72	40.4451917	-104.5551362	0.38	
14099.00	89.570	179.980	6882.49	7848.11	-7673.39	1712.20	3262974.89	1406330.73	40.4449337	-104.5551364	1.16	
14194.00	89.820	179.650	6882.99	7941.94	-7768.39	1712.50	3262975.20	1406235.74	40.4446729	-104.5551390	0.44	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH DATA (181 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
14288.00	89.570	180.020	6883.50	8034.79	-7862.39	1712.77	3262975.47	1406141.74	40.4444149	-104.5551416	0.48	
14383.00	89.970	179.600	6883.88	8128.62	-7957.39	1713.09	3262975.78	1406046.75	40.4441542	-104.5551441	0.61	
14478.00	89.540	179.250	6884.28	8222.56	-8052.38	1714.04	3262976.74	1405951.76	40.4438934	-104.5551443	0.58	
14572.00	89.750	179.610	6884.87	8315.50	-8146.37	1714.98	3262977.67	1405857.77	40.4436354	-104.5551446	0.44	
14667.00	89.600	179.350	6885.40	8409.42	-8241.37	1715.84	3262978.53	1405762.78	40.4433746	-104.5551451	0.32	
14761.00	89.970	179.000	6885.76	8502.43	-8335.36	1717.19	3262979.89	1405668.79	40.4431166	-104.5551438	0.54	
14856.00	90.030	178.900	6885.76	8596.48	-8430.34	1718.93	3262981.63	1405573.81	40.4428559	-104.5551412	0.12	
14951.00	89.450	178.330	6886.19	8690.60	-8525.31	1721.23	3262983.92	1405478.84	40.4425951	-104.5551366	0.86	
15046.00	89.970	180.220	6886.67	8784.57	-8620.30	1722.43	3262985.13	1405383.86	40.4423344	-104.5551359	2.06	
15140.00	89.480	180.100	6887.12	8877.33	-8714.30	1722.17	3262984.86	1405289.86	40.4420764	-104.5551405	0.54	
15329.00	89.510	179.230	6888.79	9064.08	-8903.28	1723.27	3262985.97	1405100.88	40.4415576	-104.5551437	0.46	
15423.00	90.650	179.490	6888.65	9157.04	-8997.28	1724.32	3262987.02	1405006.90	40.4412996	-104.5551435	1.24	
15518.00	90.400	179.700	6887.78	9250.93	-9092.27	1724.99	3262987.69	1404911.91	40.4410389	-104.5551448	0.34	
15612.00	90.090	179.550	6887.38	9343.83	-9186.27	1725.61	3262988.30	1404817.91	40.4407808	-104.5551462	0.37	
15707.00	90.280	179.700	6887.08	9437.71	-9281.27	1726.23	3262988.93	1404722.92	40.4405201	-104.5551476	0.25	
15801.00	90.340	179.590	6886.57	9530.60	-9375.26	1726.81	3262989.51	1404628.93	40.4402621	-104.5551491	0.13	
15896.00	90.340	179.980	6886.00	9624.44	-9470.26	1727.17	3262989.86	1404533.93	40.4400013	-104.5551514	0.41	
15990.00	90.220	179.640	6885.54	9717.29	-9564.26	1727.48	3262990.18	1404439.94	40.4397433	-104.5551539	0.38	
16085.00	90.550	179.630	6884.91	9811.17	-9659.25	1728.09	3262990.78	1404344.94	40.4394826	-104.5551554	0.35	
16179.00	90.030	179.030	6884.43	9904.14	-9753.24	1729.19	3262991.88	1404250.96	40.4392245	-104.5551550	0.84	
16274.00	90.370	179.340	6884.10	9998.13	-9848.23	1730.54	3262993.23	1404155.97	40.4389638	-104.5551538	0.48	
16368.00	90.280	179.410	6883.56	10091.09	-9942.23	1731.56	3262994.26	1404061.98	40.4387058	-104.5551537	0.12	
16463.00	90.770	179.090	6882.69	10185.07	-10037.21	1732.81	3262995.50	1403967.00	40.4384450	-104.5551529	0.62	
16558.00	89.450	178.740	6882.51	10279.12	-10132.20	1734.61	3262997.30	1403872.02	40.4381843	-104.5551501	1.44	
16652.00	89.750	179.120	6883.17	10372.18	-10226.18	1736.36	3262999.05	1403778.04	40.4379263	-104.5551473	0.52	
16747.00	89.690	179.130	6883.63	10466.19	-10321.16	1737.81	3263000.51	1403683.06	40.4376655	-104.5551458	0.06	
16841.00	89.750	179.460	6884.09	10559.17	-10415.16	1738.97	3263001.66	1403589.07	40.4374075	-104.5551452	0.36	
16936.00	89.780	179.160	6884.48	10653.13	-10510.15	1740.11	3263002.81	1403494.08	40.4371467	-104.5551447	0.32	
17031.00	89.540	178.950	6885.05	10747.15	-10605.13	1741.68	3263004.37	1403399.10	40.4368860	-104.5551427	0.34	
17086.00	89.380	178.640	6885.56	10801.62	-10660.12	1742.84	3263005.53	1403344.12	40.4367350	-104.5551407	0.63	LAST BH MWD SURVEY

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH DATA (181 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
17110.00†	89.380	178.640	6885.82	10825.40	-10684.11	1743.41	3263006.10	1403320.13	40.4366692	-104.5551396	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: RAMPART A33-750 AWB Ref Wellpath: RAMPART A33-750 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	1949.00	1919.00	30.00	1948.81	0.04	0.03	12.99	4.67

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.28-T06N-R64W	20.00	-218.66	-2417.11	3258845.74	1413785.18	40.4655147	-104.5696903	polygon
	2D Polygon: dimensions not calculated							
SEC.33-T06N-R64W	20.00	-218.66	-2417.11	3258845.74	1413785.18	40.4655147	-104.5696903	polygon
	2D Polygon: dimensions not calculated							
RAMPART A33-750 TPZ REV-1 (460'FNL & 2640'FWL,SEC.28)	6847.00	-1078.24	1641.28	3262903.98	1412925.63	40.4630376	-104.5551387	point
RAMPART A33-750 BHL REV-1 (460'FSL & 2634'FEL,SEC.33)	6887.00	-10689.55	1723.72	3262986.41	1403314.69	40.4366548	-104.5552105	point

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH COMPOSITION - Ref Wellbore: RAMPART A33-750 AWB Ref Wellpath: RAMPART A33-750 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1928.00	Gyrodatta 2015 - GC+DROP+COND	Gyrodatta 2015 - GC+DROP+COND 13-1/2" <78 - 1928>	RAMPART A33-750 AWB	8/2/2021
1928.00	17110.00	OWSG MWD rev2 (MS+IFR1)	OWSG MWD rev2 (MS+IFR1) 8-1/2" <1993 - 17086>	RAMPART A33-750 AWB	8/10/2021

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-750
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350927
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-750 AWB
Slot	SLOT#34 RAMPART A33-750 (652'FSL & 1005'FWL,SEC.21)		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
78.00	0.450	36.150	78.00	FIRST GYRODATA SURVEY
1928.00	1.870	50.520	1927.82	LAST GYRODATA SURVEY
1993.00	1.040	59.810	1992.80	FIRST BH MWD SURVEY
17086.00	89.380	178.640	6885.56	LAST BH MWD SURVEY
17110.00	89.380	178.640	6885.82	PROJECTION TO BIT