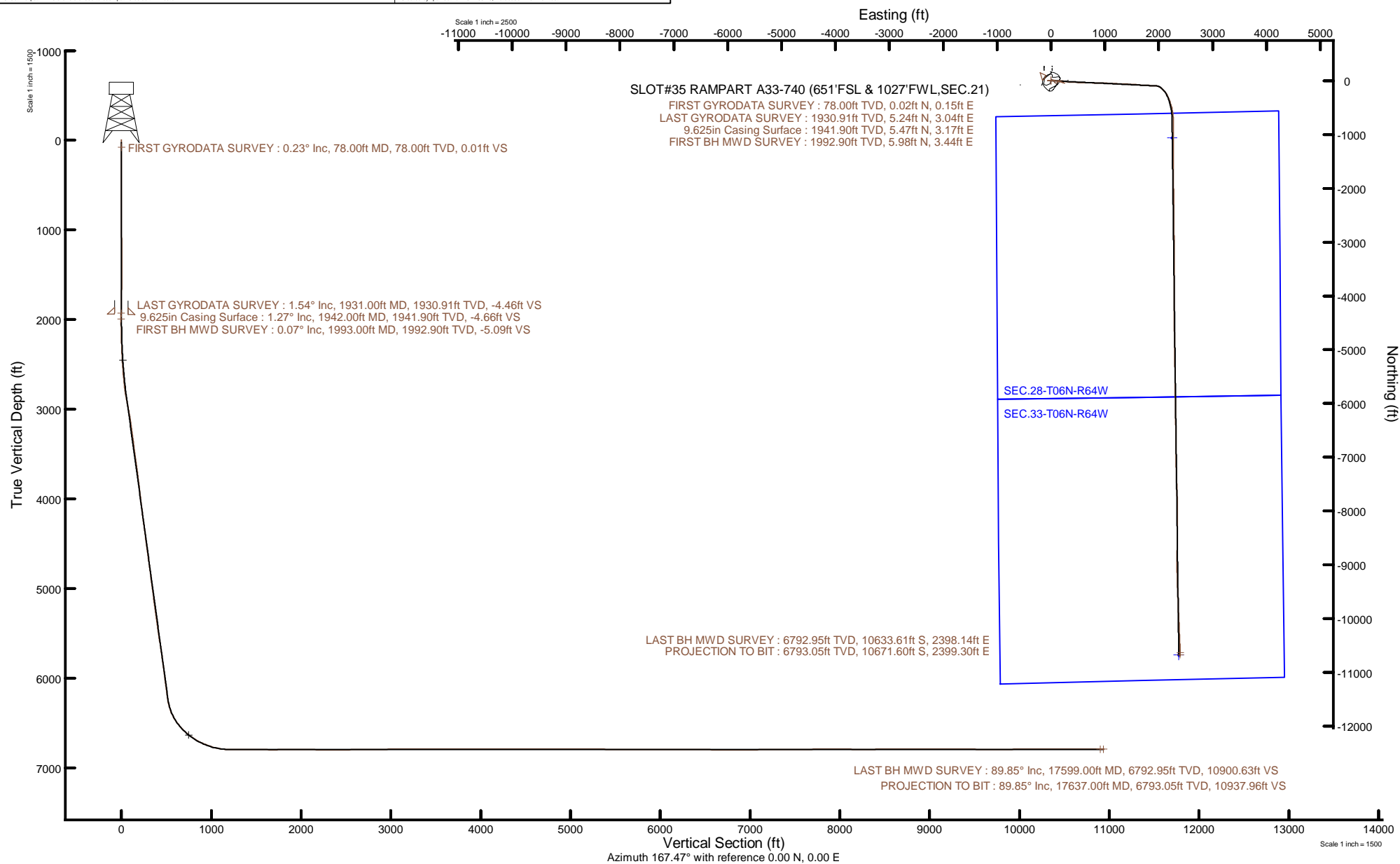


Location:	COLORADO	Slot:	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	RAMPART A33-740
Facility:	SEC.21-T06N-R64W	Wellbore:	RAMPART A33-740 PWB
Plot reference wellpath is RAMPART A33-740 PWP Rev.A.0		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	
True vertical depths are referenced to H&P 517 (30T) (RT)		North Reference: Grid north	
Reference wellpath measured depths are referenced to H&P 517 (30T) (RT)		Scale: True distance	
H&P 517 (30T) (RT) to Mean Sea Level: 4757 feet		Coordinates are in feet referenced to Slot	
Mean Sea Level to Ground level (At Slot: SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)): 0 feet		Depths are in feet	
Offset wellpath MDs are referenced to each path's default MD datum			
Created by: painstmr on 2021-08-20; Database: WellArchitectDB			



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'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	8/20/2021 at 3:06:26 PM
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	-198.97	-21.55	3261285.21	1414003.92	40.4660445°	-104.5609150°
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#35 RAMPART A33-740 (651'FSL & 1027'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	167.47°

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

WELLPATH DATA (189 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	81.800	0.00	0.00	0.00	0.00	3261285.21	1414003.92	40.4660445	-104.5609150	0.00	
78.00	0.230	81.800	78.00	0.01	0.02	0.15	3261285.36	1414003.94	40.4660446	-104.5609145	0.29	FIRST GYRODATA SURVEY
171.00	0.590	72.790	171.00	-0.01	0.19	0.80	3261286.01	1414004.11	40.4660450	-104.5609121	0.39	
262.00	0.570	32.000	261.99	-0.37	0.71	1.48	3261286.69	1414004.63	40.4660464	-104.5609096	0.44	
357.00	0.380	62.260	356.99	-0.79	1.26	2.01	3261287.22	1414005.18	40.4660479	-104.5609077	0.32	
451.00	0.270	203.820	450.99	-0.70	1.20	2.20	3261287.41	1414005.12	40.4660477	-104.5609071	0.65	
546.00	0.300	316.400	545.99	-0.73	1.18	1.94	3261287.15	1414005.10	40.4660477	-104.5609080	0.50	
640.00	0.030	41.990	639.99	-0.95	1.37	1.79	3261286.99	1414005.29	40.4660482	-104.5609085	0.32	
735.00	0.140	146.200	734.99	-0.86	1.30	1.87	3261287.08	1414005.22	40.4660480	-104.5609083	0.16	
829.00	0.330	180.190	828.99	-0.49	0.93	1.93	3261287.14	1414004.85	40.4660470	-104.5609080	0.24	
924.00	0.060	163.160	923.99	-0.17	0.61	1.94	3261287.15	1414004.53	40.4660461	-104.5609080	0.29	
1019.00	0.280	199.330	1018.99	0.07	0.34	1.88	3261287.09	1414004.26	40.4660454	-104.5609082	0.25	
1113.00	0.320	189.800	1112.98	0.51	-0.13	1.76	3261286.97	1414003.79	40.4660441	-104.5609087	0.07	
1208.00	0.170	196.450	1207.98	0.88	-0.53	1.67	3261286.88	1414003.39	40.4660430	-104.5609090	0.16	
1302.00	0.290	205.150	1301.98	1.19	-0.88	1.53	3261286.74	1414003.04	40.4660420	-104.5609095	0.13	
1397.00	0.110	174.550	1396.98	1.47	-1.19	1.44	3261286.65	1414002.73	40.4660412	-104.5609099	0.21	
1491.00	0.220	252.120	1490.98	1.58	-1.33	1.28	3261286.49	1414002.59	40.4660408	-104.5609105	0.24	
1586.00	0.340	342.270	1585.98	1.31	-1.12	1.02	3261286.23	1414002.80	40.4660414	-104.5609114	0.43	
1680.00	0.890	3.960	1679.98	0.34	-0.13	0.98	3261286.19	1414003.79	40.4660441	-104.5609115	0.63	
1775.00	1.250	16.460	1774.96	-1.28	1.60	1.33	3261286.54	1414005.52	40.4660489	-104.5609102	0.45	
1869.00	1.600	27.030	1868.93	-3.19	3.76	2.21	3261287.42	1414007.68	40.4660547	-104.5609069	0.46	
1931.00	1.540	30.910	1930.91	-4.46	5.24	3.04	3261288.25	1414009.16	40.4660588	-104.5609039	0.20	LAST GYRODATA SURVEY
1993.00	0.070	312.730	1992.90	-5.09	5.98	3.44	3261288.65	1414009.90	40.4660608	-104.5609024	2.46	FIRST BH MWD SURVEY
2087.00	2.540	96.970	2086.87	-4.45	5.77	5.46	3261290.67	1414009.69	40.4660602	-104.5608952	2.76	
2182.00	5.460	94.350	2181.63	-2.43	5.17	12.06	3261297.27	1414009.09	40.4660583	-104.5608715	3.08	
2277.00	7.130	93.900	2276.05	0.55	4.43	22.45	3261307.66	1414008.35	40.4660560	-104.5608342	1.76	
2371.00	9.480	93.070	2369.06	4.28	3.62	36.00	3261321.21	1414007.54	40.4660534	-104.5607855	2.50	
2466.00	13.660	92.630	2462.11	9.32	2.68	55.03	3261340.24	1414006.60	40.4660503	-104.5607172	4.40	
2560.00	17.220	91.810	2552.70	15.68	1.73	80.03	3261365.24	1414005.65	40.4660469	-104.5606273	3.79	
2655.00	20.230	91.750	2642.66	23.21	0.79	110.51	3261395.72	1414004.71	40.4660434	-104.5605178	3.17	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

WELLPATH DATA (189 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	23.670	91.510	2730.76	31.89	-0.22	146.00	3261431.21	1414003.70	40.4660397	-104.5603903	3.62	
2844.00	27.200	93.640	2815.64	42.46	-2.08	186.32	3261471.52	1414001.84	40.4660334	-104.5602455	3.88	
2939.00	27.900	99.510	2899.88	56.85	-7.13	229.92	3261515.12	1413996.79	40.4660182	-104.5600890	2.95	
3033.00	27.580	99.400	2983.08	73.23	-14.32	273.07	3261558.27	1413989.60	40.4659973	-104.5599342	0.34	
3128.00	27.700	98.910	3067.24	89.52	-21.33	316.58	3261601.78	1413982.59	40.4659767	-104.5597781	0.27	
3223.00	26.900	90.700	3151.69	102.52	-25.01	359.90	3261645.10	1413978.91	40.4659654	-104.5596226	4.05	
3318.00	25.660	94.620	3236.87	113.50	-26.93	401.90	3261687.09	1413976.99	40.4659589	-104.5594717	2.24	
3412.00	27.170	92.050	3321.06	124.91	-29.34	443.64	3261728.83	1413974.58	40.4659511	-104.5593218	2.01	
3507.00	27.550	92.270	3405.43	135.99	-30.99	487.27	3261772.46	1413972.93	40.4659453	-104.5591651	0.41	
3601.00	27.210	93.610	3488.90	147.52	-33.20	530.44	3261815.63	1413970.72	40.4659379	-104.5590101	0.75	
3696.00	27.270	92.090	3573.37	159.05	-35.36	573.86	3261859.05	1413968.56	40.4659307	-104.5588541	0.74	
3790.00	27.860	91.290	3656.70	169.73	-36.64	617.34	3261902.53	1413967.28	40.4659260	-104.5586979	0.74	
3885.00	27.600	91.740	3740.79	180.46	-37.81	661.53	3261946.71	1413966.11	40.4659215	-104.5585391	0.35	
3980.00	27.730	90.800	3824.93	190.98	-38.79	705.63	3261990.81	1413965.13	40.4659175	-104.5583807	0.48	
4075.00	27.680	91.160	3909.03	201.30	-39.54	749.79	3262034.97	1413964.38	40.4659141	-104.5582220	0.18	
4169.00	27.630	90.660	3992.30	211.45	-40.24	793.41	3262078.59	1413963.69	40.4659110	-104.5580653	0.25	
4264.00	27.460	91.710	4076.53	221.86	-41.14	837.33	3262122.51	1413962.78	40.4659072	-104.5579075	0.54	
4358.00	27.430	91.720	4159.95	232.53	-42.44	880.64	3262165.81	1413961.48	40.4659024	-104.5577519	0.03	
4453.00	27.300	92.270	4244.32	243.48	-43.96	924.28	3262209.45	1413959.96	40.4658969	-104.5575951	0.30	
4547.00	27.520	91.690	4327.76	254.32	-45.45	967.52	3262252.70	1413958.47	40.4658916	-104.5574398	0.37	
4642.00	27.700	92.200	4411.95	265.33	-46.95	1011.53	3262296.70	1413956.97	40.4658862	-104.5572817	0.31	
4736.00	27.500	92.490	4495.25	276.51	-48.73	1055.04	3262340.21	1413955.19	40.4658800	-104.5571254	0.26	
4831.00	27.260	92.290	4579.61	287.76	-50.55	1098.69	3262383.86	1413953.37	40.4658737	-104.5569686	0.27	
4925.00	27.480	92.610	4663.08	298.94	-52.40	1141.87	3262427.03	1413951.52	40.4658674	-104.5568135	0.28	
5020.00	27.250	92.840	4747.45	310.43	-54.48	1185.48	3262470.65	1413949.45	40.4658604	-104.5566568	0.27	
5114.00	27.480	92.650	4830.93	321.81	-56.55	1228.64	3262513.81	1413947.38	40.4658535	-104.5565018	0.26	
5209.00	26.980	92.980	4915.41	333.32	-58.68	1272.06	3262557.22	1413945.24	40.4658464	-104.5563459	0.55	
5303.00	27.750	91.200	4998.89	344.21	-60.25	1315.23	3262600.39	1413943.68	40.4658408	-104.5561908	1.20	
5398.00	27.510	91.870	5083.05	354.92	-61.42	1359.27	3262644.43	1413942.50	40.4658363	-104.5560325	0.41	
5493.00	27.070	92.970	5167.48	366.16	-63.26	1402.79	3262687.95	1413940.66	40.4658300	-104.5558762	0.70	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

WELLPATH DATA (189 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
5587.00	26.960	94.070	5251.23	377.96	-65.88	1445.41	3262730.56	1413938.04	40.4658215	-104.5557232	0.54	
5682.00	26.940	92.710	5335.91	389.77	-68.43	1488.38	3262773.54	1413935.50	40.4658133	-104.5555688	0.65	
5777.00	26.930	92.640	5420.60	401.06	-70.44	1531.37	3262816.52	1413933.49	40.4658065	-104.5554144	0.03	
5871.00	27.240	93.770	5504.30	412.67	-72.83	1574.10	3262859.25	1413931.09	40.4657987	-104.5552610	0.64	
5966.00	26.960	95.010	5588.87	425.27	-76.14	1617.25	3262902.40	1413927.78	40.4657884	-104.5551060	0.66	
6060.00	27.360	96.920	5672.50	438.88	-80.60	1659.92	3262945.06	1413923.32	40.4657749	-104.5549529	1.02	
6155.00	25.130	92.550	5757.71	451.41	-84.13	1701.75	3262986.90	1413919.79	40.4657640	-104.5548027	3.10	
6250.00	27.410	92.080	5842.89	462.17	-85.82	1743.76	3263028.90	1413918.10	40.4657581	-104.5546518	2.41	
6344.00	27.160	92.180	5926.44	473.08	-87.43	1786.82	3263071.96	1413916.50	40.4657524	-104.5544971	0.27	
6439.00	26.960	93.110	6011.04	484.39	-89.42	1829.99	3263115.13	1413914.50	40.4657457	-104.5543420	0.49	
6533.00	26.910	92.040	6094.84	495.49	-91.33	1872.53	3263157.67	1413912.59	40.4657392	-104.5541892	0.52	
6628.00	26.050	92.350	6179.87	506.26	-92.95	1914.85	3263199.99	1413910.97	40.4657335	-104.5540372	0.92	
6722.00	26.810	98.050	6264.06	519.02	-96.77	1956.47	3263241.61	1413907.16	40.4657218	-104.5538878	2.82	
6817.00	30.400	112.370	6347.55	540.33	-108.93	1999.98	3263285.12	1413894.99	40.4656871	-104.5537319	8.12	
6911.00	34.550	128.100	6426.98	574.63	-134.49	2043.05	3263328.18	1413869.43	40.4656157	-104.5535781	9.98	
7006.00	40.950	135.880	6502.10	622.05	-173.52	2085.99	3263371.12	1413830.40	40.4655073	-104.5534253	8.39	
7100.00	47.200	143.730	6569.65	679.96	-223.53	2127.91	3263413.04	1413780.40	40.4653689	-104.5532766	8.82	
7195.00	52.190	153.940	6631.17	748.49	-285.47	2165.09	3263450.22	1413718.46	40.4651978	-104.5531453	9.72	
7289.00	58.810	158.860	6684.41	824.47	-356.44	2195.95	3263481.08	1413647.49	40.4650021	-104.5530371	8.26	
7384.00	65.530	161.930	6728.74	907.79	-435.55	2224.05	3263509.18	1413568.39	40.4647841	-104.5529392	7.63	
7479.00	72.820	167.880	6762.52	996.39	-521.20	2247.04	3263532.17	1413482.74	40.4645484	-104.5528598	9.65	
7573.00	79.510	172.590	6785.00	1087.47	-611.08	2262.45	3263547.58	1413392.86	40.4643012	-104.5528079	8.62	
7668.00	88.180	178.710	6795.18	1180.82	-705.13	2269.57	3263554.69	1413298.82	40.4640429	-104.5527860	11.15	
7762.00	89.940	180.720	6796.72	1272.66	-799.11	2270.03	3263555.16	1413204.85	40.4637849	-104.5527879	2.84	
7857.00	89.820	180.020	6796.92	1365.26	-894.10	2269.42	3263554.54	1413109.85	40.4635242	-104.5527937	0.75	
7952.00	89.910	180.110	6797.15	1457.97	-989.10	2269.31	3263554.44	1413014.86	40.4632634	-104.5527978	0.13	
8046.00	89.510	180.110	6797.62	1549.69	-1083.10	2269.13	3263554.26	1412920.86	40.4630055	-104.5528020	0.43	
8141.00	89.910	180.190	6798.10	1642.37	-1178.10	2268.88	3263554.01	1412825.87	40.4627447	-104.5528066	0.43	
8236.00	90.120	180.430	6798.08	1735.00	-1273.10	2268.37	3263553.49	1412730.87	40.4624840	-104.5528121	0.34	
8331.00	90.180	179.710	6797.83	1827.71	-1368.10	2268.25	3263553.38	1412635.88	40.4622232	-104.5528161	0.76	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

WELLPATH DATA (189 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
8425.00	90.120	177.970	6797.58	1919.86	-1462.07	2270.16	3263555.28	1412541.90	40.4619653	-104.5528129	1.85	
8519.00	91.020	180.040	6796.65	2011.95	-1556.05	2271.79	3263556.91	1412447.93	40.4617073	-104.5528106	2.40	
8613.00	88.490	179.170	6797.05	2103.84	-1650.04	2272.44	3263557.56	1412353.95	40.4614493	-104.5528119	2.85	
8708.00	89.940	179.630	6798.35	2196.77	-1745.02	2273.43	3263558.56	1412258.97	40.4611885	-104.5528120	1.60	
8803.00	89.880	179.380	6798.50	2289.68	-1840.02	2274.25	3263559.38	1412163.97	40.4609278	-104.5528127	0.27	
8897.00	90.000	179.300	6798.60	2381.67	-1934.01	2275.34	3263560.46	1412069.98	40.4606698	-104.5528124	0.15	
8992.00	90.220	179.400	6798.42	2474.64	-2029.00	2276.41	3263561.54	1411974.99	40.4604090	-104.5528122	0.25	
9086.00	90.340	178.830	6797.96	2566.70	-2122.99	2277.87	3263562.99	1411881.01	40.4601510	-104.5528106	0.62	
9181.00	91.540	178.930	6796.40	2659.81	-2217.96	2279.72	3263564.84	1411786.05	40.4598903	-104.5528075	1.27	
9275.00	90.460	181.660	6794.76	2751.44	-2311.93	2279.24	3263564.36	1411692.08	40.4596324	-104.5528129	3.12	
9370.00	90.030	177.740	6794.35	2844.26	-2406.91	2279.73	3263564.86	1411597.10	40.4593717	-104.5528147	4.15	
9465.00	91.140	179.450	6793.38	2937.46	-2501.87	2282.06	3263567.19	1411502.14	40.4591110	-104.5528100	2.15	
9559.00	90.950	180.870	6791.67	3029.15	-2595.85	2281.80	3263566.92	1411408.16	40.4588530	-104.5528146	1.52	
9654.00	89.820	179.090	6791.03	3121.88	-2690.85	2281.83	3263566.96	1411313.18	40.4585923	-104.5528181	2.22	
9749.00	89.880	179.910	6791.28	3214.80	-2785.84	2282.66	3263567.79	1411218.18	40.4583315	-104.5528188	0.87	
9843.00	90.280	177.850	6791.15	3306.93	-2879.82	2284.50	3263569.62	1411124.21	40.4580735	-104.5528158	2.23	
9938.00	90.370	179.120	6790.61	3400.18	-2974.78	2287.01	3263572.14	1411029.25	40.4578128	-104.5528104	1.34	
10032.00	90.340	179.000	6790.03	3492.26	-3068.77	2288.55	3263573.68	1410935.27	40.4575548	-104.5528085	0.13	
10127.00	89.850	179.690	6789.87	3585.22	-3163.76	2289.64	3263574.76	1410840.28	40.4572940	-104.5528082	0.89	
10221.00	89.970	179.750	6790.02	3677.08	-3257.76	2290.10	3263575.22	1410746.29	40.4570360	-104.5528102	0.14	
10316.00	90.310	179.660	6789.78	3769.92	-3352.76	2290.59	3263575.71	1410651.29	40.4567753	-104.5528120	0.37	
10411.00	89.660	179.480	6789.81	3862.81	-3447.75	2291.30	3263576.42	1410556.30	40.4565145	-104.5528131	0.71	
10506.00	90.180	180.130	6789.94	3955.62	-3542.75	2291.63	3263576.75	1410461.30	40.4562537	-104.5528156	0.88	
10600.00	89.850	180.110	6789.92	4047.33	-3636.75	2291.43	3263576.55	1410367.31	40.4559958	-104.5528199	0.35	
10695.00	90.550	180.370	6789.58	4139.98	-3731.75	2291.03	3263576.15	1410272.31	40.4557350	-104.5528250	0.79	
10789.00	89.660	179.560	6789.41	4231.75	-3825.75	2291.09	3263576.21	1410178.32	40.4554770	-104.5528284	1.28	
10884.00	89.600	179.390	6790.03	4324.67	-3920.74	2291.96	3263577.08	1410083.33	40.4552163	-104.5528289	0.19	
10979.00	89.750	180.130	6790.56	4417.49	-4015.74	2292.36	3263577.48	1409988.33	40.4549555	-104.5528311	0.79	
11073.00	90.620	180.590	6790.26	4509.12	-4109.74	2291.77	3263576.89	1409894.34	40.4546975	-104.5528369	1.05	
11167.00	89.910	180.350	6789.83	4600.71	-4203.73	2290.99	3263576.12	1409800.35	40.4544396	-104.5528433	0.80	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

WELLPATH DATA (189 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
11262.00	89.690	180.130	6790.16	4693.36	-4298.73	2290.60	3263575.72	1409705.35	40.4541788	-104.5528483	0.33	
11357.00	89.750	180.000	6790.62	4786.07	-4393.73	2290.49	3263575.61	1409610.36	40.4539181	-104.5528524	0.15	
11451.00	89.850	180.280	6790.95	4877.78	-4487.73	2290.26	3263575.38	1409516.36	40.4536601	-104.5528568	0.32	
11546.00	89.940	178.680	6791.12	4970.69	-4582.72	2291.12	3263576.24	1409421.37	40.4533993	-104.5528573	1.69	
11640.00	89.780	179.100	6791.35	5062.83	-4676.70	2292.94	3263578.07	1409327.40	40.4531413	-104.5528544	0.48	
11735.00	89.750	179.220	6791.74	5155.86	-4771.69	2294.34	3263579.46	1409232.41	40.4528806	-104.5528530	0.13	
11830.00	89.880	179.710	6792.05	5248.78	-4866.69	2295.22	3263580.34	1409137.42	40.4526198	-104.5528535	0.53	
11924.00	89.420	178.520	6792.62	5340.84	-4960.67	2296.67	3263581.80	1409043.44	40.4523618	-104.5528519	1.36	
12019.00	89.540	178.970	6793.49	5434.00	-5055.64	2298.75	3263583.88	1408948.47	40.4521011	-104.5528481	0.49	
12113.00	89.970	179.830	6793.89	5525.97	-5149.64	2299.74	3263584.86	1408854.48	40.4518431	-104.5528481	1.02	
12207.00	89.880	179.610	6794.01	5617.83	-5243.64	2300.20	3263585.32	1408760.48	40.4515851	-104.5528501	0.25	
12302.00	89.720	178.800	6794.34	5710.84	-5338.62	2301.52	3263586.64	1408665.50	40.4513243	-104.5528490	0.87	
12397.00	89.660	179.550	6794.86	5803.86	-5433.61	2302.88	3263588.01	1408570.51	40.4510635	-104.5528477	0.79	
12491.00	89.780	179.590	6795.32	5895.77	-5527.61	2303.59	3263588.71	1408476.52	40.4508055	-104.5528488	0.13	
12586.00	89.970	179.000	6795.52	5988.76	-5622.60	2304.76	3263589.88	1408381.53	40.4505448	-104.5528483	0.65	
12681.00	89.850	178.970	6795.67	6081.84	-5717.59	2306.44	3263591.56	1408286.55	40.4502840	-104.5528459	0.13	
12775.00	89.880	179.100	6795.89	6173.93	-5811.57	2308.02	3263593.15	1408192.57	40.4500260	-104.5528438	0.14	
12869.00	89.510	178.370	6796.40	6266.12	-5905.55	2310.10	3263595.22	1408098.60	40.4497680	-104.5528399	0.87	
12964.00	90.430	180.600	6796.45	6359.03	-6000.54	2310.95	3263596.08	1408003.61	40.4495073	-104.5528405	2.54	
13059.00	89.480	178.650	6796.52	6451.89	-6095.53	2311.58	3263596.70	1407908.62	40.4492465	-104.5528419	2.28	
13154.00	89.080	178.040	6797.71	6545.18	-6190.48	2314.32	3263599.44	1407813.67	40.4489858	-104.5528357	0.77	
13248.00	89.020	179.330	6799.27	6637.37	-6284.44	2316.48	3263601.60	1407719.72	40.4487279	-104.5528316	1.37	
13343.00	89.570	179.470	6800.44	6730.31	-6379.43	2317.47	3263602.59	1407624.73	40.4484671	-104.5528316	0.60	
13437.00	89.690	177.160	6801.05	6822.62	-6473.38	2320.23	3263605.36	1407530.79	40.4482092	-104.5528253	2.46	
13532.00	90.180	180.040	6801.16	6915.82	-6568.34	2322.55	3263607.68	1407435.83	40.4479484	-104.5528206	3.08	
13627.00	91.230	179.790	6799.99	7008.58	-6663.33	2322.70	3263607.82	1407340.84	40.4476877	-104.5528237	1.14	
13721.00	91.230	179.730	6797.97	7100.40	-6757.31	2323.09	3263608.21	1407246.87	40.4474298	-104.5528259	0.06	
13816.00	91.020	180.010	6796.10	7193.17	-6852.29	2323.31	3263608.43	1407151.89	40.4471691	-104.5528288	0.37	
13910.00	90.150	179.490	6795.14	7285.01	-6946.28	2323.72	3263608.84	1407057.90	40.4469111	-104.5528309	1.08	
14005.00	90.250	179.990	6794.81	7377.84	-7041.28	2324.15	3263609.27	1406962.91	40.4466503	-104.5528330	0.54	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

WELLPATH DATA (189 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
14099.00	90.550	179.170	6794.16	7469.74	-7135.28	2324.84	3263609.96	1406868.92	40.4463923	-104.5528342	0.93	
14194.00	89.970	178.110	6793.73	7562.94	-7230.25	2327.09	3263612.21	1406773.95	40.4461316	-104.5528297	1.27	
14288.00	90.490	178.140	6793.35	7655.32	-7324.20	2330.17	3263615.29	1406680.00	40.4458736	-104.5528223	0.55	
14383.00	90.120	178.710	6792.84	7748.58	-7419.16	2332.78	3263617.90	1406585.04	40.4456129	-104.5528165	0.72	
14478.00	90.000	178.010	6792.74	7841.87	-7514.12	2335.50	3263620.62	1406490.09	40.4453522	-104.5528104	0.75	
14572.00	90.090	178.130	6792.67	7934.27	-7608.06	2338.66	3263623.78	1406396.15	40.4450942	-104.5528026	0.16	
14667.00	89.850	178.080	6792.72	8027.63	-7703.01	2341.80	3263626.92	1406301.20	40.4448335	-104.5527950	0.26	
14761.00	89.720	177.630	6793.07	8120.09	-7796.95	2345.32	3263630.44	1406207.27	40.4445756	-104.5527860	0.50	
14856.00	89.970	179.040	6793.33	8213.38	-7891.90	2348.08	3263633.20	1406112.32	40.4443149	-104.5527797	1.51	
14951.00	90.030	178.890	6793.33	8306.48	-7986.89	2349.80	3263634.92	1406017.34	40.4440541	-104.5527772	0.17	
15046.00	90.310	181.190	6793.05	8399.19	-8081.88	2349.73	3263634.85	1405922.35	40.4437934	-104.5527811	2.44	
15140.00	89.820	180.460	6792.94	8490.65	-8175.87	2348.38	3263633.50	1405828.36	40.4435355	-104.5527895	0.94	
15235.00	90.490	180.140	6792.68	8583.28	-8270.87	2347.88	3263633.00	1405733.37	40.4432747	-104.5527950	0.78	
15329.00	90.250	180.440	6792.08	8674.93	-8364.86	2347.40	3263632.52	1405639.37	40.4430168	-104.5528003	0.41	
15423.00	89.880	180.220	6791.97	8766.57	-8458.86	2346.86	3263631.98	1405545.38	40.4427588	-104.5528058	0.46	
15518.00	89.820	180.170	6792.22	8859.24	-8553.86	2346.54	3263631.66	1405450.38	40.4424980	-104.5528106	0.08	
15612.00	90.090	181.690	6792.29	8950.65	-8647.85	2345.01	3263630.13	1405356.40	40.4422401	-104.5528197	1.64	
15707.00	90.120	181.800	6792.12	9042.72	-8742.80	2342.12	3263627.24	1405261.45	40.4419796	-104.5528338	0.12	
15801.00	90.090	181.680	6791.95	9133.81	-8836.76	2339.27	3263624.39	1405167.50	40.4417218	-104.5528476	0.13	
15896.00	89.820	179.120	6792.02	9226.40	-8931.75	2338.60	3263623.72	1405072.51	40.4414611	-104.5528537	2.71	
15990.00	89.690	178.950	6792.42	9318.49	-9025.73	2340.19	3263625.31	1404978.53	40.4412031	-104.5528516	0.23	
16085.00	89.850	178.860	6792.80	9411.60	-9120.72	2342.00	3263627.12	1404883.55	40.4409423	-104.5528487	0.19	
16179.00	89.880	178.760	6793.02	9503.76	-9214.70	2343.95	3263629.07	1404789.58	40.4406843	-104.5528453	0.11	
16274.00	89.750	177.590	6793.33	9597.11	-9309.64	2346.98	3263632.10	1404694.63	40.4404236	-104.5528381	1.24	
16368.00	90.310	178.380	6793.28	9689.52	-9403.59	2350.28	3263635.41	1404600.69	40.4401657	-104.5528298	1.03	
16463.00	89.570	177.550	6793.38	9782.93	-9498.52	2353.66	3263638.78	1404505.76	40.4399050	-104.5528213	1.17	
16558.00	90.400	177.420	6793.41	9876.48	-9593.43	2357.83	3263642.95	1404410.85	40.4396444	-104.5528100	0.88	
16652.00	90.220	178.450	6792.90	9968.92	-9687.37	2361.21	3263646.33	1404316.92	40.4393864	-104.5528014	1.11	
16747.00	90.280	178.170	6792.48	10062.22	-9782.33	2364.02	3263649.14	1404221.97	40.4391257	-104.5527950	0.30	
16842.00	90.120	178.010	6792.15	10155.59	-9877.27	2367.18	3263652.30	1404127.02	40.4388650	-104.5527873	0.24	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

WELLPATH DATA (189 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
16936.00	89.380	176.960	6792.56	10248.16	-9971.18	2371.31	3263656.43	1404033.12	40.4386072	-104.5527761	1.37	
17031.00	90.150	177.700	6792.95	10341.75	-10066.07	2375.73	3263660.85	1403938.23	40.4383466	-104.5527638	1.12	
17126.00	90.120	177.740	6792.73	10435.23	-10161.00	2379.51	3263664.63	1403843.31	40.4380859	-104.5527539	0.05	
17220.00	89.940	177.800	6792.68	10527.72	-10254.93	2383.17	3263668.29	1403749.38	40.4378280	-104.5527443	0.20	
17315.00	89.940	177.200	6792.78	10621.26	-10349.84	2387.31	3263672.43	1403654.48	40.4375674	-104.5527331	0.63	
17410.00	89.970	177.070	6792.85	10714.91	-10444.72	2392.06	3263677.18	1403559.60	40.4373068	-104.5527197	0.14	
17504.00	90.030	178.650	6792.85	10807.37	-10538.65	2395.57	3263680.69	1403465.67	40.4370489	-104.5527107	1.68	
17599.00	89.850	178.250	6792.95	10900.63	-10633.61	2398.14	3263683.26	1403370.71	40.4367882	-104.5527051	0.46	LAST BH MWD SURVEY
17637.00†	89.850	178.250	6793.05	10937.96	-10671.60	2399.30	3263684.42	1403332.73	40.4366839	-104.5527024	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: RAMPART A33-740 AWB Ref Wellpath: RAMPART A33-740 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	1942.00	1912.00	30.00	1941.90	0.00	0.02	5.47	3.17

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

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	-218.75	-2439.56	3258845.74	1413785.18	40.4655147	-104.5696903	polygon
	2D Polygon: dimensions not calculated							
SEC.33-T06N-R64W	20.00	-218.75	-2439.56	3258845.74	1413785.18	40.4655147	-104.5696903	polygon
	2D Polygon: dimensions not calculated							
RAMPART A33-740 BHL REV-1 (460'FSL & 1962'FEL,SEC.33)	6795.00	-10674.13	2372.82	3263657.94	1403330.19	40.4366777	-104.5527976	point
RAMPART A33-740 TPZ REV-1 (460'FNL & 1980'FEL,SEC.28)	6795.00	-1064.52	2252.42	3263537.54	1412939.45	40.4630570	-104.5528614	point

WELLPATH COMPOSITION - Ref Wellbore: RAMPART A33-740 AWB Ref Wellpath: RAMPART A33-740 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1931.00	Gyrodatta 2015 - GC+DROP+COND	Gyrodatta 2015 - GC+DROP+COND 13-1/2" <78 - 1931>	RAMPART A33-740 AWB	8/2/2021
1931.00	17637.00	OWSG MWD rev2 (MS+IFR1)	OWSG MWD rev2 (MS+IFR1) 8-1/2" <1993 - 17599>	RAMPART A33-740 AWB	8/16/2021

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A33-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350925
Facility	SEC.21-T06N-R64W	Wellbore	RAMPART A33-740 AWB
Slot	SLOT#35 RAMPART A33-740 (651'FSL & 1027'FWL,SEC.21)		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
78.00	0.230	81.800	78.00	FIRST GYRODATA SURVEY
1931.00	1.540	30.910	1930.91	LAST GYRODATA SURVEY
1993.00	0.070	312.730	1992.90	FIRST BH MWD SURVEY
17599.00	89.850	178.250	6792.95	LAST BH MWD SURVEY
17637.00	89.850	178.250	6793.05	PROJECTION TO BIT