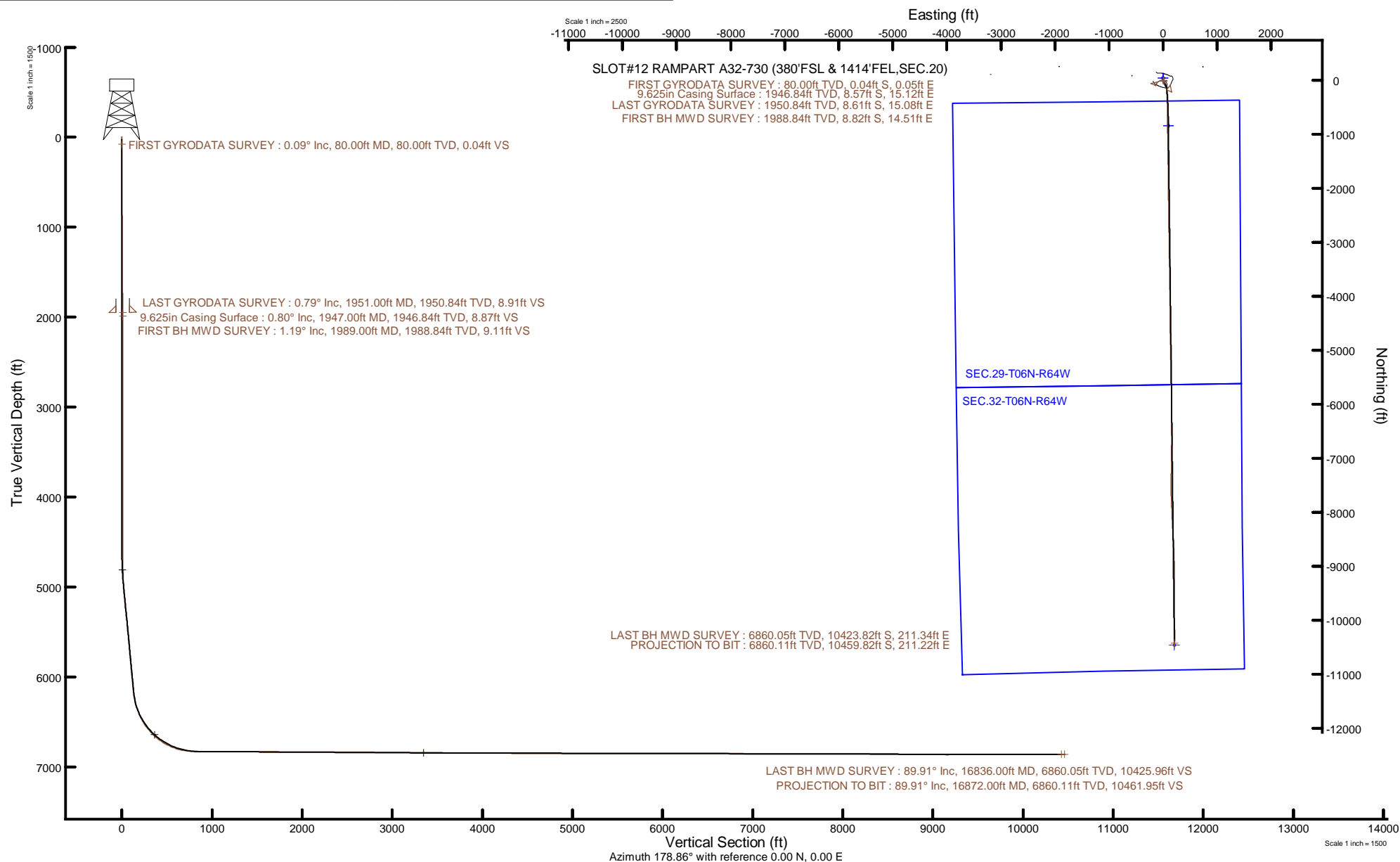


Location:	COLORADO	Slot:	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	RAMPART A32-730
Facility:	SEC.20-T06N-R64W	Wellbore:	RAMPART A32-730 PWB



Plot reference wellpath is RAMPART A32-730 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: 4736 feet	Coordinates are in feet referenced to Siot
Mean Sea Level to Ground level (At Slot: SLOTF12 RAMPART A32-730 (380FSL & 1414FEL SEC.20): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: painstre on 2021-09-07; Database: WellArchitectDB





Actual Wellpath Report

RAMPART A32-730 AWP

Page 1 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'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	Painsetr
Scale	0.999964	Report Generated	9/7/2021 at 3:07:03 PM
Convergence at slot	0.60° 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	-254.49	-737.19	3258846.27	1413695.20	40.4652677°	-104.5696918°
Facility Reference Pt			3259583.43	1413949.68	40.4659449°	-104.5670330°
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	4736.00ft
Horizontal Reference Pt	Slot	H&P 517 (30') (RT) to Mean Sea Level	4736.00ft
Vertical Reference Pt	H&P 517 (30') (RT)	H&P 517 (30') (RT) to Ground Level at Slot (SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20))	4736.00ft
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	178.86°

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (176 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	126.840	0.00	0.00	0.00	0.00	3258846.27	1413695.20	40.4652677	-104.5696918	0.00	
80.00	0.090	126.840	80.00	0.04	-0.04	0.05	3258846.32	1413695.16	40.4652676	-104.5696916	0.11	FIRST GYRODATA SURVEY
173.00	0.080	156.530	173.00	0.14	-0.14	0.13	3258846.40	1413695.06	40.4652673	-104.5696913	0.05	
264.00	0.340	67.950	264.00	0.11	-0.10	0.41	3258846.68	1413695.10	40.4652674	-104.5696903	0.38	
359.00	0.080	97.970	359.00	0.02	0.00	0.74	3258847.01	1413695.20	40.4652677	-104.5696891	0.29	
453.00	0.130	267.640	453.00	0.03	-0.01	0.70	3258846.97	1413695.19	40.4652676	-104.5696893	0.22	
547.00	0.410	101.830	547.00	0.11	-0.09	0.92	3258847.19	1413695.11	40.4652674	-104.5696885	0.57	
642.00	0.440	91.270	642.00	0.20	-0.17	1.62	3258847.89	1413695.03	40.4652672	-104.5696860	0.09	
736.00	0.550	86.300	735.99	0.19	-0.14	2.43	3258848.70	1413695.06	40.4652672	-104.5696831	0.13	
831.00	0.380	117.960	830.99	0.33	-0.26	3.16	3258849.43	1413694.94	40.4652669	-104.5696805	0.32	
925.00	0.740	86.060	924.98	0.45	-0.37	4.04	3258850.31	1413694.83	40.4652666	-104.5696773	0.49	
1020.00	0.730	98.760	1019.98	0.52	-0.42	5.25	3258851.52	1413694.78	40.4652664	-104.5696729	0.17	
1114.00	1.120	105.440	1113.96	0.89	-0.75	6.73	3258853.00	1413694.45	40.4652654	-104.5696676	0.43	
1209.00	1.240	122.990	1208.94	1.73	-1.56	8.49	3258854.76	1413693.64	40.4652632	-104.5696614	0.40	
1303.00	0.960	103.870	1302.93	2.50	-2.30	10.10	3258856.37	1413692.90	40.4652611	-104.5696556	0.49	
1398.00	0.800	107.170	1397.92	2.92	-2.69	11.51	3258857.78	1413692.51	40.4652600	-104.5696505	0.18	
1493.00	0.940	103.980	1492.91	3.33	-3.07	12.90	3258859.17	1413692.13	40.4652589	-104.5696456	0.16	
1587.00	0.790	118.370	1586.89	3.85	-3.57	14.22	3258860.49	1413691.63	40.4652575	-104.5696408	0.28	
1681.00	1.030	132.800	1680.88	4.76	-4.45	15.41	3258861.68	1413690.75	40.4652550	-104.5696366	0.35	
1776.00	1.090	174.610	1775.87	6.25	-5.93	16.12	3258862.39	1413689.27	40.4652509	-104.5696341	0.80	
1871.00	1.030	207.770	1870.85	7.90	-7.58	15.81	3258862.08	1413687.62	40.4652464	-104.5696353	0.64	
1951.00	0.790	224.570	1950.84	8.91	-8.61	15.08	3258861.35	1413686.59	40.4652436	-104.5696379	0.45	LAST GYRODATA SURVEY
1989.00	1.190	267.200	1988.84	9.11	-8.82	14.51	3258860.78	1413686.38	40.4652431	-104.5696400	2.13	FIRST BH MWD SURVEY
2083.00	0.160	110.800	2082.83	9.18	-8.91	13.65	3258859.92	1413686.29	40.4652428	-104.5696431	1.42	
2178.00	0.040	178.290	2177.83	9.27	-8.99	13.78	3258860.05	1413686.21	40.4652426	-104.5696426	0.16	
2273.00	0.140	202.120	2272.83	9.41	-9.13	13.74	3258860.01	1413686.07	40.4652422	-104.5696428	0.11	
2367.00	0.250	211.340	2366.83	9.69	-9.42	13.59	3258859.86	1413685.78	40.4652414	-104.5696433	0.12	
2462.00	0.340	183.130	2461.83	10.14	-9.87	13.46	3258859.73	1413685.33	40.4652402	-104.5696438	0.18	
2556.00	0.410	4.250	2555.83	10.08	-9.82	13.47	3258859.74	1413685.38	40.4652404	-104.5696438	0.80	
2745.00	0.310	300.720	2744.83	9.14	-8.88	13.08	3258859.35	1413686.32	40.4652429	-104.5696451	0.21	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (176 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
2840.00	0.500	111.720	2839.82	9.17	-8.90	13.25	3258859.52	1413686.30	40.4652429	-104.5696445	0.85	
2935.00	0.320	309.050	2934.82	9.16	-8.89	13.43	3258859.70	1413686.31	40.4652429	-104.5696439	0.85	
3029.00	0.600	29.940	3028.82	8.57	-8.30	13.47	3258859.74	1413686.90	40.4652445	-104.5696437	0.67	
3124.00	0.580	295.080	3123.82	7.93	-7.66	13.28	3258859.55	1413687.54	40.4652463	-104.5696444	0.91	
3218.00	0.340	185.350	3217.82	7.99	-7.74	12.82	3258859.09	1413687.46	40.4652461	-104.5696460	0.81	
3313.00	0.620	185.490	3312.81	8.78	-8.53	12.75	3258859.02	1413686.67	40.4652439	-104.5696463	0.29	
3408.00	0.160	84.660	3407.81	9.29	-9.03	12.83	3258859.10	1413686.17	40.4652425	-104.5696460	0.70	
3502.00	0.540	28.020	3501.81	8.89	-8.63	13.17	3258859.44	1413686.57	40.4652436	-104.5696448	0.50	
3597.00	0.320	166.130	3596.81	8.76	-8.49	13.44	3258859.71	1413686.71	40.4652440	-104.5696438	0.85	
3692.00	0.070	203.600	3691.81	9.07	-8.80	13.48	3258859.75	1413686.40	40.4652431	-104.5696437	0.28	
3786.00	0.070	54.550	3785.81	9.09	-8.82	13.51	3258859.78	1413686.38	40.4652431	-104.5696436	0.14	
3881.00	0.040	204.690	3880.81	9.09	-8.82	13.54	3258859.81	1413686.38	40.4652431	-104.5696435	0.11	
3975.00	0.100	136.860	3974.81	9.18	-8.91	13.58	3258859.85	1413686.29	40.4652428	-104.5696433	0.10	
4070.00	0.110	114.480	4069.81	9.28	-9.00	13.72	3258859.99	1413686.20	40.4652426	-104.5696428	0.04	
4165.00	0.030	139.740	4164.81	9.34	-9.06	13.82	3258860.09	1413686.14	40.4652424	-104.5696425	0.09	
4259.00	0.030	85.490	4258.81	9.35	-9.08	13.86	3258860.13	1413686.12	40.4652424	-104.5696423	0.03	
4354.00	0.030	66.410	4353.81	9.34	-9.07	13.91	3258860.18	1413686.13	40.4652424	-104.5696421	0.01	
4449.00	0.000	97.000	4448.81	9.33	-9.06	13.93	3258860.20	1413686.14	40.4652424	-104.5696421	0.03	
4544.00	0.070	168.800	4543.81	9.39	-9.11	13.94	3258860.21	1413686.09	40.4652423	-104.5696420	0.07	
4638.00	0.090	216.110	4637.81	9.51	-9.23	13.91	3258860.18	1413685.97	40.4652420	-104.5696421	0.07	
4733.00	0.150	193.980	4732.81	9.69	-9.41	13.84	3258860.11	1413685.79	40.4652415	-104.5696424	0.08	
4827.00	0.990	155.620	4826.80	10.55	-10.27	14.14	3258860.41	1413684.93	40.4652391	-104.5696414	0.93	
4922.00	3.090	154.680	4921.74	13.64	-13.33	15.58	3258861.85	1413681.87	40.4652306	-104.5696363	2.21	
5017.00	5.250	153.350	5016.48	19.90	-19.53	18.62	3258864.89	1413675.67	40.4652135	-104.5696256	2.28	
5111.00	6.090	156.470	5110.02	28.39	-27.95	22.54	3258868.81	1413667.25	40.4651903	-104.5696118	0.95	
5206.00	6.480	158.630	5204.45	38.08	-37.56	26.51	3258872.78	1413657.64	40.4651638	-104.5695980	0.48	
5300.00	6.290	158.740	5297.86	47.89	-47.30	30.31	3258876.58	1413647.90	40.4651370	-104.5695847	0.20	
5395.00	6.310	152.560	5392.29	57.46	-56.78	34.60	3258880.87	1413638.42	40.4651108	-104.5695696	0.71	
5490.00	6.420	150.150	5486.71	66.80	-66.02	39.65	3258885.92	1413629.18	40.4650853	-104.5695518	0.30	
5584.00	5.430	151.310	5580.20	75.35	-74.48	44.40	3258890.67	1413620.72	40.4650620	-104.5695350	1.06	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (176 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
5679.00	4.650	153.010	5674.83	82.80	-81.86	48.31	3258894.57	1413613.35	40.4650416	-104.5695213	0.84	
5773.00	5.670	152.960	5768.45	90.41	-89.39	52.15	3258898.41	1413605.82	40.4650208	-104.5695078	1.09	
5868.00	6.330	152.450	5862.93	99.32	-98.21	56.70	3258902.97	1413596.99	40.4649965	-104.5694917	0.70	
6057.00	5.830	153.410	6050.87	117.32	-116.03	65.82	3258912.09	1413579.17	40.4649473	-104.5694596	0.27	
6152.00	5.770	152.280	6145.38	125.95	-124.57	70.20	3258916.47	1413570.63	40.4649237	-104.5694442	0.14	
6246.00	10.370	186.730	6238.47	138.57	-137.17	71.41	3258917.67	1413558.03	40.4648891	-104.5694404	6.90	
6341.00	17.070	187.900	6330.71	160.84	-159.50	68.49	3258914.75	1413535.71	40.4648279	-104.5694517	7.06	
6435.00	24.120	180.650	6418.66	193.70	-192.42	66.37	3258912.64	1413502.79	40.4647376	-104.5694606	7.96	
6530.00	31.020	173.900	6502.84	237.56	-236.23	68.75	3258915.02	1413458.98	40.4646173	-104.5694536	7.96	
6625.00	38.710	177.780	6580.74	291.73	-290.34	72.51	3258918.78	1413404.87	40.4644687	-104.5694422	8.42	
6719.00	47.520	177.370	6649.29	355.90	-354.47	75.25	3258921.51	1413340.75	40.4642926	-104.5694348	9.38	
6814.00	54.950	177.050	6708.74	429.89	-428.40	78.86	3258925.13	1413266.82	40.4640896	-104.5694246	7.83	
6908.00	63.110	179.840	6757.07	510.41	-508.89	80.96	3258927.23	1413186.33	40.4638686	-104.5694200	9.04	
7003.00	71.710	179.200	6793.53	598.03	-596.52	81.71	3258927.98	1413098.71	40.4636281	-104.5694207	9.07	
7097.00	80.100	179.300	6816.40	689.11	-687.60	82.90	3258929.17	1413007.63	40.4633780	-104.5694198	8.93	
7192.00	87.840	179.260	6826.37	783.51	-781.99	84.09	3258930.35	1412913.24	40.4631189	-104.5694191	8.15	
7287.00	89.510	179.390	6828.57	878.48	-876.96	85.21	3258931.47	1412818.28	40.4628582	-104.5694187	1.76	
7381.00	89.260	179.070	6829.58	972.47	-970.94	86.47	3258932.74	1412724.30	40.4626002	-104.5694177	0.43	
7476.00	89.570	179.390	6830.55	1067.47	-1065.93	87.75	3258934.01	1412629.31	40.4623395	-104.5694167	0.47	
7570.00	89.690	179.060	6831.16	1161.46	-1159.92	89.02	3258935.28	1412535.33	40.4620815	-104.5694156	0.37	
7665.00	90.000	179.110	6831.41	1256.46	-1254.90	90.53	3258936.80	1412440.34	40.4618207	-104.5694138	0.33	
7759.00	89.820	179.170	6831.56	1350.46	-1348.89	91.94	3258938.21	1412346.36	40.4615627	-104.5694123	0.20	
7854.00	89.880	178.960	6831.81	1445.46	-1443.88	93.49	3258939.76	1412251.37	40.4613019	-104.5694103	0.23	
7948.00	89.420	179.560	6832.39	1539.46	-1537.87	94.71	3258940.98	1412157.39	40.4610439	-104.5694094	0.80	
8043.00	90.030	179.680	6832.84	1634.45	-1632.87	95.34	3258941.61	1412062.40	40.4607832	-104.5694108	0.65	
8137.00	89.690	178.960	6833.07	1728.44	-1726.86	96.45	3258942.72	1411968.41	40.4605252	-104.5694103	0.85	
8232.00	89.690	179.270	6833.58	1823.44	-1821.85	97.92	3258944.19	1411873.42	40.4602644	-104.5694086	0.33	
8326.00	89.910	179.610	6833.91	1917.43	-1915.84	98.84	3258945.11	1411779.43	40.4600064	-104.5694089	0.43	
8515.00	89.720	178.950	6834.52	2106.43	-2104.82	101.22	3258947.48	1411590.46	40.4594876	-104.5694074	0.36	
8610.00	89.420	179.030	6835.24	2201.42	-2199.81	102.89	3258949.16	1411495.48	40.4592269	-104.5694050	0.33	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (176 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
8705.00	89.780	179.460	6835.90	2296.42	-2294.80	104.14	3258950.41	1411400.49	40.4589661	-104.5694041	0.59	
8799.00	89.510	179.140	6836.48	2390.41	-2388.79	105.29	3258951.56	1411306.50	40.4587081	-104.5694035	0.45	
8894.00	89.600	179.350	6837.22	2485.41	-2483.78	106.54	3258952.81	1411211.52	40.4584474	-104.5694026	0.24	
8989.00	89.630	179.360	6837.86	2580.40	-2578.77	107.61	3258953.88	1411116.53	40.4581866	-104.5694023	0.03	
9083.00	90.710	179.390	6837.58	2674.40	-2672.76	108.64	3258954.90	1411022.54	40.4579286	-104.5694022	1.15	
9178.00	89.110	178.400	6837.73	2769.39	-2767.74	110.47	3258956.73	1410927.57	40.4576678	-104.5693992	1.98	
9272.00	89.480	179.010	6838.88	2863.38	-2861.71	112.59	3258958.86	1410833.60	40.4574099	-104.5693951	0.76	
9367.00	89.720	178.880	6839.55	2958.38	-2956.69	114.34	3258960.61	1410738.63	40.4571491	-104.5693924	0.29	
9461.00	89.630	178.770	6840.08	3052.38	-3050.67	116.27	3258962.54	1410644.65	40.4568911	-104.5693890	0.15	
9556.00	89.820	179.110	6840.54	3147.38	-3145.65	118.03	3258964.29	1410549.67	40.4566304	-104.5693863	0.41	
9650.00	89.880	179.330	6840.78	3241.38	-3239.64	119.31	3258965.57	1410455.68	40.4563723	-104.5693852	0.24	
9745.00	89.780	179.420	6841.07	3336.37	-3334.63	120.34	3258966.61	1410360.69	40.4561116	-104.5693851	0.14	
9840.00	89.290	178.950	6841.84	3431.37	-3429.62	121.69	3258967.96	1410265.71	40.4558508	-104.5693838	0.71	
9934.00	89.510	178.980	6842.82	3525.36	-3523.60	123.39	3258969.66	1410171.73	40.4555928	-104.5693813	0.24	
10029.00	89.350	178.970	6843.77	3620.36	-3618.58	125.09	3258971.36	1410076.76	40.4553321	-104.5693787	0.17	
10123.00	89.720	179.020	6844.53	3714.35	-3712.56	126.74	3258973.00	1409982.78	40.4550741	-104.5693764	0.40	
10218.00	89.540	179.790	6845.14	3809.35	-3807.55	127.73	3258973.99	1409887.79	40.4548133	-104.5693764	0.83	
10312.00	89.660	179.420	6845.80	3903.34	-3901.55	128.37	3258974.64	1409793.80	40.4545553	-104.5693776	0.41	
10407.00	89.780	179.100	6846.26	3998.33	-3996.54	129.60	3258975.87	1409698.81	40.4542946	-104.5693768	0.36	
10502.00	89.660	179.390	6846.73	4093.33	-4091.53	130.85	3258977.12	1409603.83	40.4540338	-104.5693759	0.33	
10596.00	89.720	179.860	6847.24	4187.32	-4185.53	131.47	3258977.73	1409509.83	40.4537758	-104.5693772	0.50	
10691.00	89.600	179.000	6847.80	4282.31	-4280.52	132.41	3258978.68	1409414.84	40.4535150	-104.5693774	0.91	
10785.00	89.750	179.560	6848.33	4376.31	-4374.51	133.59	3258979.86	1409320.86	40.4532570	-104.5693767	0.62	
10880.00	89.450	179.440	6849.00	4471.30	-4469.50	134.42	3258980.69	1409225.87	40.4529963	-104.5693773	0.34	
10974.00	89.320	179.730	6850.00	4565.28	-4563.50	135.10	3258981.37	1409131.88	40.4527383	-104.5693784	0.34	
11069.00	89.850	179.080	6850.69	4660.28	-4658.49	136.09	3258982.36	1409036.89	40.4524775	-104.5693784	0.88	
11163.00	91.080	178.910	6849.93	4754.27	-4752.47	137.74	3258984.00	1408942.91	40.4522195	-104.5693761	1.32	
11258.00	89.940	179.250	6849.08	4849.27	-4847.45	139.26	3258985.53	1408847.93	40.4519588	-104.5693742	1.25	
11352.00	89.970	179.280	6849.16	4943.26	-4941.44	140.47	3258986.74	1408753.95	40.4517008	-104.5693734	0.05	
11447.00	89.290	178.550	6849.77	5038.26	-5036.42	142.27	3258988.53	1408658.97	40.4514400	-104.5693705	1.05	

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (176 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
11541.00	90.460	179.120	6849.98	5132.26	-5130.40	144.18	3258990.44	1408564.99	40.4511820	-104.5693672	1.38	
11636.00	90.220	178.990	6849.41	5227.26	-5225.39	145.75	3258992.01	1408470.01	40.4509213	-104.5693651	0.29	
11730.00	90.310	178.830	6848.98	5321.25	-5319.37	147.54	3258993.80	1408376.03	40.4506632	-104.5693622	0.20	
11825.00	89.940	179.290	6848.77	5416.25	-5414.36	149.09	3258995.36	1408281.05	40.4504025	-104.5693602	0.62	
11919.00	90.250	178.980	6848.61	5510.25	-5508.34	150.51	3258996.78	1408187.07	40.4501445	-104.5693587	0.47	
12014.00	89.820	178.830	6848.56	5605.25	-5603.33	152.33	3258998.59	1408092.09	40.4498837	-104.5693557	0.48	
12108.00	90.180	178.900	6848.56	5699.25	-5697.31	154.19	3259000.45	1407998.11	40.4496257	-104.5693526	0.39	
12203.00	89.660	179.210	6848.69	5794.25	-5792.29	155.76	3259002.02	1407903.13	40.4493650	-104.5693505	0.64	
12298.00	90.520	179.280	6848.54	5889.25	-5887.29	157.01	3259003.27	1407808.14	40.4491042	-104.5693496	0.91	
12392.00	89.940	180.340	6848.16	5983.23	-5981.28	157.32	3259003.58	1407714.15	40.4488462	-104.5693520	1.29	
12487.00	89.540	180.340	6848.59	6078.20	-6076.28	156.76	3259003.02	1407619.15	40.4485855	-104.5693576	0.42	
12581.00	89.480	180.310	6849.40	6172.16	-6170.27	156.22	3259002.49	1407525.16	40.4483275	-104.5693631	0.07	
12676.00	90.400	179.870	6849.50	6267.14	-6265.27	156.07	3259002.34	1407430.17	40.4480668	-104.5693672	1.07	
12771.00	89.380	179.250	6849.68	6362.13	-6360.27	156.80	3259003.07	1407335.17	40.4478060	-104.5693682	1.26	
12865.00	89.600	178.660	6850.52	6456.13	-6454.25	158.52	3259004.78	1407241.20	40.4475480	-104.5693656	0.67	
12960.00	89.110	178.570	6851.59	6551.12	-6549.21	160.81	3259007.08	1407146.24	40.4472873	-104.5693609	0.52	
13149.00	90.520	180.880	6852.20	6740.08	-6738.19	161.72	3259007.99	1406957.26	40.4467686	-104.5693648	1.43	
13244.00	89.230	181.210	6852.40	6835.01	-6833.18	159.99	3259006.25	1406862.29	40.4465079	-104.5693746	1.40	
13338.00	89.780	180.740	6853.22	6928.94	-6927.16	158.39	3259004.65	1406768.31	40.4462500	-104.5693839	0.77	
13433.00	89.660	180.750	6853.68	7023.89	-7022.15	157.15	3259003.42	1406673.32	40.4459893	-104.5693919	0.13	
13527.00	89.850	181.200	6854.08	7117.82	-7116.13	155.55	3259001.82	1406579.34	40.4457314	-104.5694012	0.52	
13622.00	89.880	180.640	6854.31	7212.76	-7211.12	154.03	3259000.29	1406484.35	40.4454707	-104.5694102	0.59	
13716.00	89.750	180.870	6854.61	7306.71	-7305.11	152.79	3258999.05	1406390.37	40.4452128	-104.5694182	0.28	
13810.00	89.720	179.900	6855.04	7400.67	-7399.11	152.16	3258998.42	1406296.37	40.4449548	-104.5694240	1.03	
13905.00	89.720	180.480	6855.51	7495.64	-7494.11	151.84	3258998.11	1406201.38	40.4446941	-104.5694288	0.61	
14000.00	89.880	180.090	6855.84	7590.61	-7589.10	151.37	3258997.64	1406106.39	40.4444333	-104.5694340	0.44	
14094.00	89.630	178.380	6856.24	7684.61	-7683.09	152.63	3258998.89	1406012.40	40.4441753	-104.5694331	1.84	
14189.00	89.540	177.970	6856.93	7779.60	-7778.04	155.65	3259001.92	1405917.46	40.4439146	-104.5694258	0.44	
14283.00	89.780	177.440	6857.49	7873.58	-7871.96	159.42	3259005.68	1405823.54	40.4436567	-104.5694158	0.62	
14378.00	90.150	177.680	6857.55	7968.55	-7966.88	163.46	3259009.72	1405728.63	40.4433961	-104.5694048	0.46	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

WELLPATH DATA (176 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
14472.00	89.970	178.010	6857.45	8062.54	-8060.81	166.99	3259013.26	1405634.70	40.4431382	-104.5693957	0.40	
14567.00	89.880	177.430	6857.57	8157.52	-8155.73	170.77	3259017.04	1405539.78	40.4428775	-104.5693857	0.62	
14662.00	89.720	176.860	6857.90	8252.47	-8250.61	175.51	3259021.77	1405444.90	40.4426170	-104.5693723	0.62	
14756.00	89.820	177.410	6858.28	8346.43	-8344.50	180.20	3259026.47	1405351.02	40.4423592	-104.5693589	0.59	
14851.00	89.420	177.460	6858.91	8441.40	-8439.40	184.46	3259030.72	1405256.12	40.4420985	-104.5693472	0.42	
14945.00	89.480	176.500	6859.81	8535.34	-8533.26	189.41	3259035.67	1405162.26	40.4418408	-104.5693330	1.02	
15039.00	89.570	177.920	6860.59	8629.30	-8627.15	193.98	3259040.25	1405068.38	40.4415830	-104.5693201	1.51	
15134.00	89.660	178.550	6861.23	8724.29	-8722.10	196.91	3259043.17	1404973.43	40.4413223	-104.5693132	0.67	
15229.00	90.280	178.220	6861.28	8819.29	-8817.06	199.59	3259045.85	1404878.48	40.4410615	-104.5693071	0.74	
15323.00	89.570	177.380	6861.40	8913.27	-8910.99	203.19	3259049.46	1404784.55	40.4408036	-104.5692977	1.17	
15418.00	89.630	178.040	6862.07	9008.25	-9005.91	206.99	3259053.25	1404689.63	40.4405430	-104.5692876	0.70	
15512.00	89.420	178.670	6862.85	9102.24	-9099.87	209.69	3259055.95	1404595.68	40.4402850	-104.5692815	0.71	
15607.00	90.370	180.630	6863.02	9197.23	-9194.86	210.27	3259056.53	1404500.69	40.4400243	-104.5692830	2.29	
15702.00	90.710	180.590	6862.12	9292.18	-9289.85	209.26	3259055.52	1404405.70	40.4397636	-104.5692902	0.36	
15796.00	89.820	180.710	6861.69	9386.13	-9383.84	208.19	3259054.45	1404311.72	40.4395056	-104.5692976	0.96	
15891.00	90.280	179.930	6861.61	9481.10	-9478.84	207.66	3259053.92	1404216.72	40.4392449	-104.5693031	0.95	
15985.00	90.180	179.660	6861.23	9575.08	-9572.84	208.00	3259054.26	1404122.73	40.4389869	-104.5693054	0.31	
16080.00	90.250	179.020	6860.87	9670.08	-9667.83	209.09	3259055.35	1404027.74	40.4387261	-104.5693051	0.68	
16174.00	89.720	179.640	6860.90	9764.07	-9761.82	210.19	3259056.45	1403933.75	40.4384681	-104.5693047	0.87	
16269.00	90.220	179.640	6860.95	9859.07	-9856.82	210.79	3259057.05	1403838.75	40.4382073	-104.5693061	0.53	
16363.00	89.940	179.850	6860.82	9953.05	-9950.82	211.21	3259057.47	1403744.76	40.4379493	-104.5693081	0.37	
16458.00	90.120	180.270	6860.77	10048.03	-10045.82	211.11	3259057.37	1403649.76	40.4376886	-104.5693121	0.48	
16552.00	90.060	179.580	6860.62	10142.02	-10139.82	211.23	3259057.49	1403555.77	40.4374306	-104.5693152	0.74	
16741.00	90.220	180.170	6860.16	10330.98	-10328.82	211.64	3259057.90	1403366.78	40.4369118	-104.5693208	0.32	
16836.00	89.910	180.190	6860.05	10425.96	-10423.82	211.34	3259057.61	1403271.78	40.4366511	-104.5693255	0.33	LAST BH MWD SURVEY
16872.00†	89.910	180.190	6860.11	10461.95	-10459.82	211.22	3259057.49	1403235.78	40.4365523	-104.5693273	0.00	PROJECTION TO BIT

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

HOLE & CASING SECTIONS - Ref Wellbore: RAMPART A32-730 AWB Ref Wellpath: RAMPART A32-730 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	1947.00	1917.00	30.00	1946.84	-0.01	0.01	-8.57	15.12

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.29-T06N-R64W	0.00	45.03	-0.33	3258845.94	1413740.23	40.4653913	-104.5696913	polygon
2D Polygon: dimensions not calculated								
SEC.32-T06N-R64W	0.00	45.03	-0.33	3258845.94	1413740.23	40.4653913	-104.5696913	polygon
2D Polygon: dimensions not calculated								
RAMPART A32-730 TPZ REV-2 (460'FNL & 1320'FEL,SEC.29)	6829.00	-838.86	98.08	3258944.34	1412856.37	40.4629624	-104.5693710	point
RAMPART A32-730 TPZ REV-1 (460'FNL & 1320'FEL,SEC.29)	6844.00	-838.86	98.08	3258944.34	1412856.37	40.4629624	-104.5693710	point
RAMPART A32-730 BHL REV-1 (460'FSL & 1287'FEL,SEC.32)	6863.00	-10460.74	208.94	3259055.20	1403234.86	40.4365498	-104.5693355	point



Actual Wellpath Report

RAMPART A32-730 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

WELLPATH COMPOSITION - Ref Wellbore: RAMPART A32-730 AWB Ref Wellpath: RAMPART A32-730 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	1951.00	Gyrodatta 2015 - GC+DROP+COND	Gyrodatta 2015 - GC+DROP+COND 13-1/2" <80 - 1951>	RAMPART A32-730 AWB	9/6/2021
1951.00	16872.00	OWSG MWD rev2 (MS+IFR1)	OWSG MWD rev2 (MS+IFR1) 8-1/2" <1989 - 16836>	RAMPART A32-730 AWB	9/6/2021



Actual Wellpath Report

RAMPART A32-730 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	RAMPART A32-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	0512350929
Facility	SEC.20-T06N-R64W	Wellbore	RAMPART A32-730 AWB
Slot	SLOT#12 RAMPART A32-730 (380'FSL & 1414'FEL,SEC.20)		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
80.00	0.090	126.840	80.00	FIRST GYRODATA SURVEY
1951.00	0.790	224.570	1950.84	LAST GYRODATA SURVEY
1989.00	1.190	267.200	1988.84	FIRST BH MWD SURVEY
16836.00	89.910	180.190	6860.05	LAST BH MWD SURVEY
16872.00	89.910	180.190	6860.11	PROJECTION TO BIT