

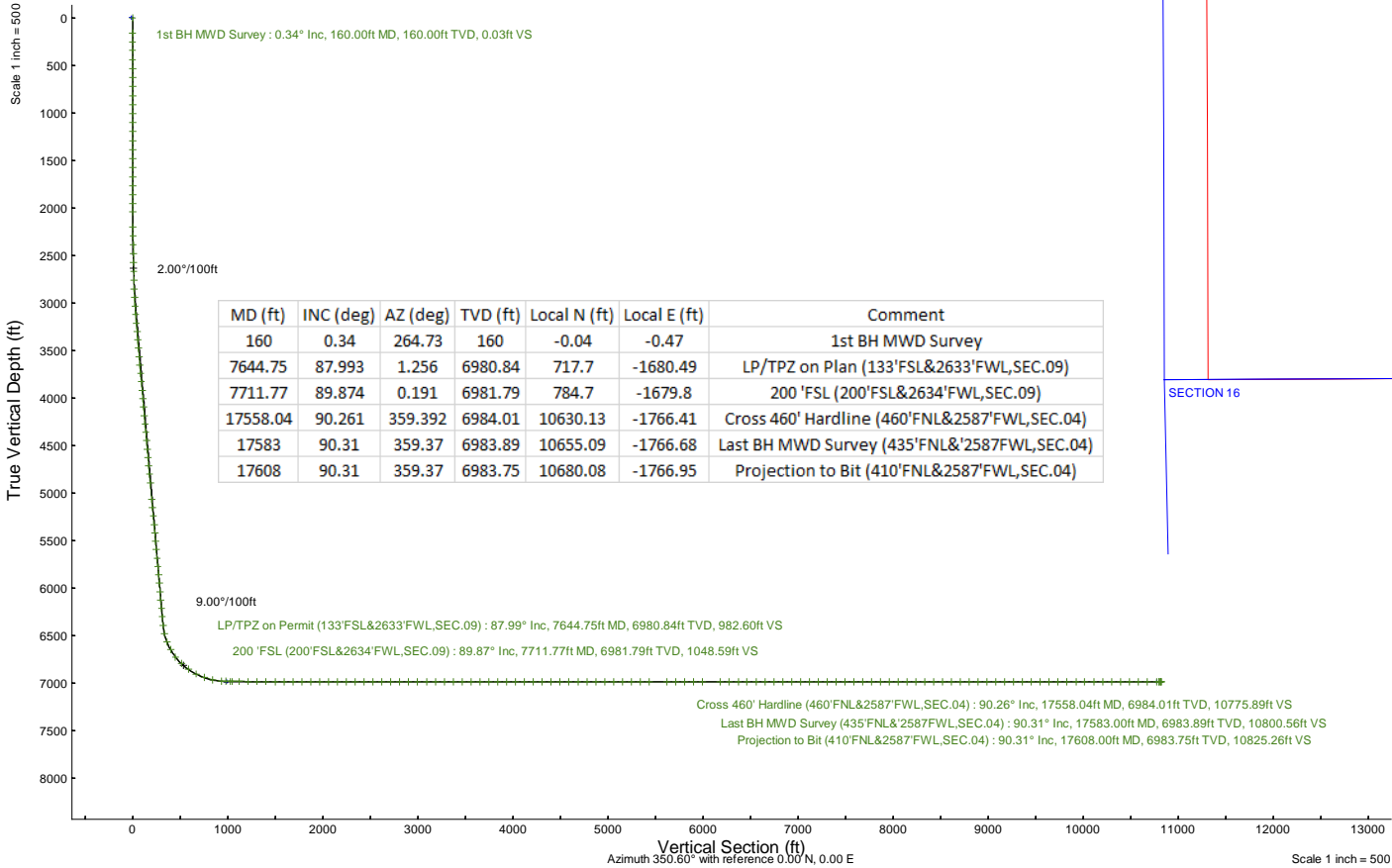
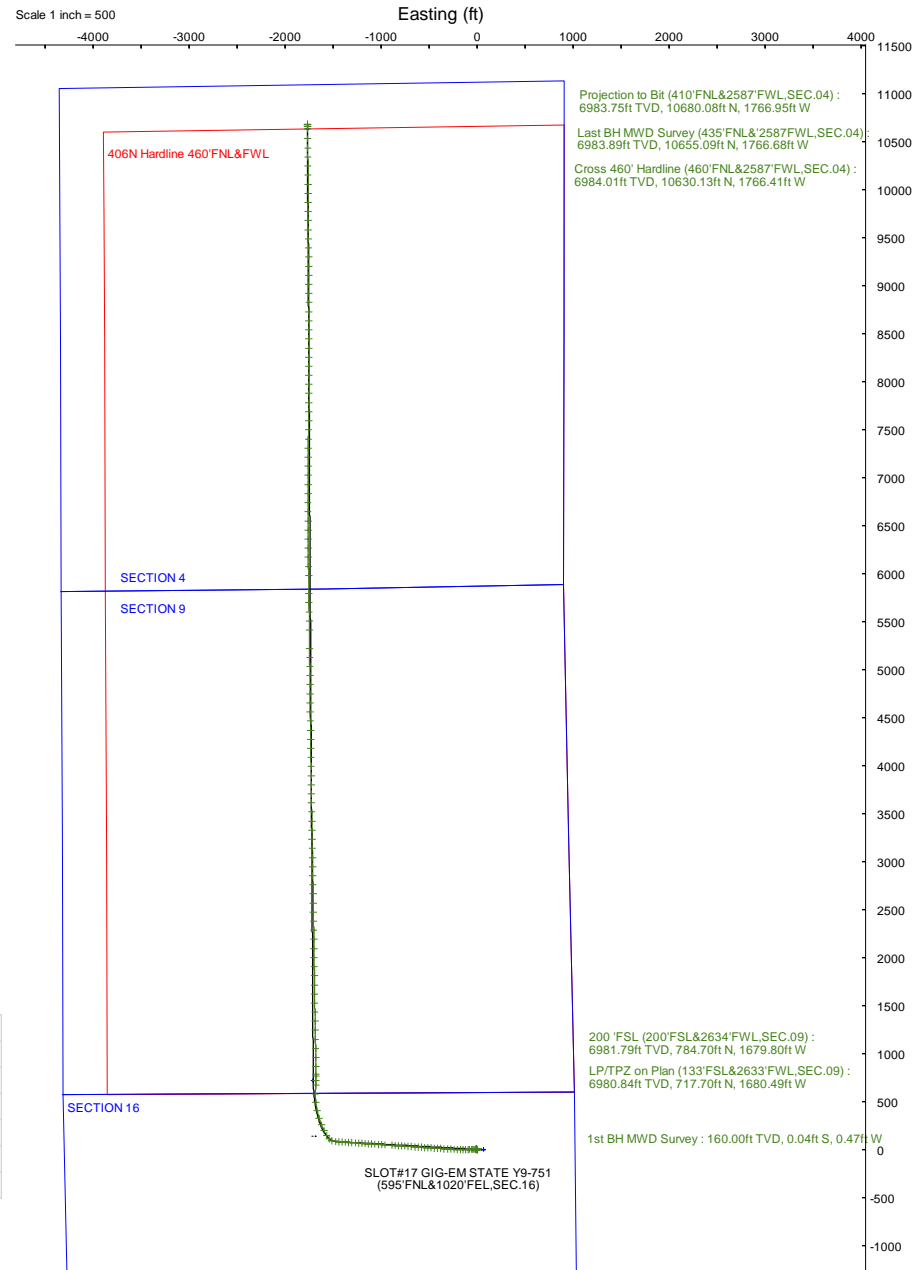
NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)
 Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GIG-EM STATE Y9-751
 Facility: SEC.16-T02N-R64W Wellbore: GIG-EM STATE Y9-751 PWB

Plot reference wellpath is GIG-EM STATE Y9-751 (REV-E.0) PWP
 True vertical depths are referenced to P268 (4942'GL+29'KB@4971'RKB) (RKB)
 Reference wellpath measured depths are referenced to P268 (4942'GL+29'KB@4971'RKB) (RKB)
 P268 (4942'GL+29'KB@4971'RKB) (RKB) are to Mean Sea Level: 4971 feet
 Mean Sea Level to Ground level (At Slot: SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)): 0 feet
 Offset wellpath MDs are referenced to each path's default MD datum
 Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
 North Reference: Grid north
 Scale: True distance
 Coordinates are in feet referenced to Slot
 Depths are in feet
 Created by: guernal on 2023-04-05; Database: WA_Denver

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.16-T02N-R64W		3261942.561	1296894.275	40°08'40.4520"N	104°33'46.8000"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)	-130.78	3459.80	3265402.312	1296763.498	40°08'38.7960"N	104°33'2.2680"W
P268 (4942'GL+29'KB@4971'RKB) (RKB) to Ground level (At Slot: SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16))				4971ft		
Mean Sea Level to Ground level (At Slot: SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16))				0ft		
P268 (4942'GL+29'KB@4971'RKB) (RKB) to Mean Sea Level				4971ft		





Actual Wellpath Report

GIG-EM STATE Y9-751 AWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-751
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51836
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-751 AWB
Slot	SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Guenaler
Scale	0.999959	Report Generated	4/5/2023 at 1:12:53 PM
Convergence at slot	0.61° East	Database	WA_Denver

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-130.78	3459.90	3265402.31	1296763.50	40.1441100°	-104.5506300°
Facility Reference Pt			3261942.56	1296894.28	40.1445700°	-104.5630000°
Field Reference Pt			3000000.00	4454105.15	48.7761986°	-105.5000000°

WELLPATH DATUM

Calculation method	Minimum curvature	P268 (4942'GL+29'KB@4971'RKB) (RKB) to Facility Vertical Datum	4971.00ft
Horizontal Reference Pt	Slot	P268 (4942'GL+29'KB@4971'RKB) (RKB) to Mean Sea Level	4971.00ft
Vertical Reference Pt	P268 (4942'GL+29'KB@4971'RKB) (RKB)	P268 (4942'GL+29'KB@4971'RKB) (RKB) to Ground Level at Slot (SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16))	4971.00ft
MD Reference Pt	P268 (4942'GL+29'KB@4971'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	350.60°



Actual Wellpath Report

GIG-EM STATE Y9-751 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-751
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51836
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-751 AWB
Slot	SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)		

WELLPATH DATA (186 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	264.730	0.00	0.00	0.00	0.00	40.1441100	-104.5506300	0.00	
160.00	0.340	264.730	160.00	0.03	-0.04	-0.47	40.1441099	-104.5506317	0.21	1st BH MWD Survey
251.00	0.360	264.200	251.00	0.07	-0.10	-1.03	40.1441098	-104.5506337	0.02	
342.00	0.550	261.460	341.99	0.10	-0.19	-1.74	40.1441095	-104.5506362	0.21	
437.00	0.550	259.680	436.99	0.10	-0.34	-2.64	40.1441091	-104.5506395	0.02	
531.00	0.470	285.820	530.99	0.25	-0.32	-3.46	40.1441092	-104.5506424	0.26	
626.00	0.620	293.670	625.98	0.70	0.00	-4.30	40.1441101	-104.5506454	0.18	
721.00	0.450	298.440	720.98	1.21	0.38	-5.10	40.1441112	-104.5506482	0.18	
816.00	0.310	300.930	815.98	1.60	0.69	-5.65	40.1441121	-104.5506502	0.15	
911.00	0.360	303.100	910.97	1.97	0.99	-6.12	40.1441129	-104.5506519	0.05	
1005.00	0.470	317.900	1004.97	2.50	1.43	-6.63	40.1441141	-104.5506536	0.16	
1100.00	0.380	328.580	1099.97	3.12	1.99	-7.05	40.1441157	-104.5506551	0.13	
1195.00	0.200	46.800	1194.97	3.50	2.37	-7.09	40.1441167	-104.5506553	0.41	
1290.00	0.220	106.620	1289.97	3.51	2.43	-6.80	40.1441169	-104.5506542	0.22	
1385.00	0.150	131.520	1384.97	3.34	2.30	-6.53	40.1441165	-104.5506533	0.11	
1480.00	0.080	115.470	1479.97	3.20	2.19	-6.38	40.1441162	-104.5506527	0.08	
1574.00	0.290	165.550	1573.97	2.93	1.93	-6.26	40.1441155	-104.5506523	0.26	
1669.00	0.370	183.700	1668.96	2.39	1.39	-6.22	40.1441140	-104.5506522	0.14	
1764.00	0.300	182.880	1763.96	1.85	0.84	-6.25	40.1441125	-104.5506523	0.07	
1858.00	0.080	271.000	1857.96	1.62	0.59	-6.33	40.1441118	-104.5506526	0.33	
1953.00	0.410	322.930	1952.96	1.93	0.86	-6.60	40.1441126	-104.5506536	0.39	
2039.00	0.640	318.970	2038.96	2.61	1.47	-7.10	40.1441142	-104.5506553	0.27	
2197.00	4.560	267.790	2196.77	4.15	1.90	-13.96	40.1441156	-104.5506799	2.65	
2292.00	5.700	267.590	2291.39	5.20	1.55	-22.45	40.1441149	-104.5507102	1.20	
2387.00	6.930	269.350	2385.81	6.64	1.29	-32.89	40.1441145	-104.5507476	1.31	
2481.00	8.930	268.840	2478.91	8.55	1.08	-45.86	40.1441143	-104.5507940	2.13	
2576.00	9.410	268.660	2572.70	10.70	0.75	-60.99	40.1441138	-104.5508481	0.51	
2671.00	10.390	268.180	2666.28	12.92	0.29	-77.32	40.1441131	-104.5509065	1.04	
2766.00	13.180	267.770	2759.27	15.40	-0.40	-96.71	40.1441117	-104.5509759	2.94	
2860.00	15.270	267.670	2850.38	18.27	-1.32	-119.79	40.1441099	-104.5510585	2.22	
2955.00	17.240	267.400	2941.58	21.47	-2.47	-146.35	40.1441075	-104.5511536	2.08	
3050.00	19.120	272.180	3031.84	26.27	-2.52	-175.97	40.1441083	-104.5512595	2.52	
3145.00	21.030	272.670	3121.06	32.96	-1.13	-208.55	40.1441130	-104.5513759	2.02	
3240.00	21.060	272.630	3209.72	40.08	0.45	-242.62	40.1441184	-104.5514978	0.04	

WELLPATH DATA (186 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3335.00	20.880	272.760	3298.43	47.20	2.05	-276.59	40.1441237	-104.5516192	0.20	
3429.00	21.180	273.710	3386.17	54.59	3.95	-310.26	40.1441300	-104.5517396	0.48	
3524.00	20.890	273.810	3474.84	62.35	6.19	-344.29	40.1441371	-104.5518612	0.31	
3619.00	21.010	273.880	3563.56	70.13	8.46	-378.18	40.1441443	-104.5519823	0.13	
3714.00	21.010	273.780	3652.25	77.93	10.74	-412.16	40.1441516	-104.5521038	0.04	
3809.00	20.840	273.910	3740.98	85.71	13.01	-446.02	40.1441588	-104.5522248	0.19	
3903.00	20.940	273.660	3828.80	93.35	15.23	-479.46	40.1441659	-104.5523443	0.14	
3998.00	20.900	273.930	3917.54	101.10	17.47	-513.31	40.1441730	-104.5524653	0.11	
4093.00	21.200	273.700	4006.20	108.90	19.74	-547.35	40.1441803	-104.5525870	0.33	
4188.00	21.160	273.750	4094.78	116.69	21.97	-581.61	40.1441874	-104.5527094	0.05	
4283.00	21.120	273.890	4183.39	124.53	24.25	-615.79	40.1441947	-104.5528316	0.07	



Actual Wellpath Report

GIG-EM STATE Y9-751 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-751
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51836
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-751 AWB
Slot	SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)		

WELLPATH DATA (186 stations) † = interpolated, ‡ = extrapolated station										
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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4377.00	21.170	273.690	4271.06	132.27	26.50	-649.63	40.1442018	-104.5529525	0.09	
4472.00	21.030	273.770	4359.69	140.04	28.72	-683.75	40.1442089	-104.5530745	0.15	
4567.00	21.090	273.780	4448.34	147.82	30.97	-717.82	40.1442161	-104.5531962	0.06	
4662.00	21.100	273.950	4536.98	155.67	33.27	-751.93	40.1442234	-104.5533181	0.07	
4757.00	21.150	273.810	4625.59	163.54	35.59	-786.09	40.1442308	-104.5534402	0.07	
4851.00	21.070	273.680	4713.29	171.24	37.80	-819.87	40.1442378	-104.5535610	0.10	
4946.00	21.100	273.840	4801.92	179.02	40.04	-853.98	40.1442450	-104.5536829	0.07	
5041.00	21.920	273.680	4890.31	186.95	42.33	-888.73	40.1442523	-104.5538071	0.87	
5230.00	21.900	273.860	5065.66	203.02	46.96	-959.11	40.1442670	-104.5540586	0.04	
5325.00	21.870	273.640	5153.81	211.08	49.28	-994.44	40.1442744	-104.5541849	0.09	
5420.00	21.770	273.700	5242.00	219.07	51.54	-1029.68	40.1442817	-104.5543109	0.11	
5515.00	21.480	273.850	5330.32	227.05	53.84	-1064.61	40.1442890	-104.5544357	0.31	
5609.00	21.290	273.890	5417.85	234.92	56.16	-1098.81	40.1442964	-104.5545579	0.20	
5704.00	20.400	273.990	5506.63	242.72	58.48	-1132.54	40.1443037	-104.5546785	0.94	
5799.00	21.720	273.560	5595.28	250.49	60.72	-1166.60	40.1443109	-104.5548002	1.40	
5894.00	21.220	273.820	5683.69	258.37	62.96	-1201.30	40.1443180	-104.5549242	0.54	
5988.00	21.360	273.980	5771.27	266.22	65.28	-1235.35	40.1443254	-104.5550459	0.16	
6083.00	21.010	273.670	5859.85	274.08	67.57	-1269.60	40.1443327	-104.5551684	0.39	
6178.00	21.190	273.800	5948.48	281.85	69.80	-1303.73	40.1443398	-104.5552904	0.20	
6273.00	20.950	273.900	6037.13	289.68	72.09	-1337.81	40.1443471	-104.5554121	0.26	
6367.00	21.710	273.600	6124.69	297.46	74.33	-1371.92	40.1443542	-104.5555341	0.82	
6462.00	21.620	273.530	6212.98	305.33	76.51	-1406.93	40.1443612	-104.5556592	0.10	
6557.00	21.200	273.650	6301.42	313.13	78.68	-1441.54	40.1443682	-104.5557829	0.44	
6652.00	22.480	274.710	6389.60	321.44	81.26	-1476.78	40.1443763	-104.5559089	1.41	
6746.00	23.540	292.540	6476.23	335.77	89.95	-1512.08	40.1444012	-104.5560348	7.47	
6841.00	24.330	316.310	6563.26	362.03	111.42	-1543.19	40.1444611	-104.5561452	10.12	
6936.00	31.190	328.300	6647.34	401.04	146.57	-1569.69	40.1445583	-104.5562387	9.28	
7030.00	39.450	335.690	6724.01	452.53	194.60	-1594.82	40.1446909	-104.5563268	9.88	
7125.00	46.890	337.970	6793.25	515.63	254.34	-1620.29	40.1448556	-104.5564156	8.00	
7220.00	54.080	342.020	6853.67	587.62	323.18	-1645.21	40.1450453	-104.5565021	8.25	
7315.00	63.310	347.860	6903.01	668.27	401.48	-1666.07	40.1452608	-104.5565737	11.04	
7410.00	71.410	353.140	6939.57	755.84	487.86	-1680.41	40.1454983	-104.5566217	9.95	
7504.00	77.300	1.250	6964.95	845.62	578.15	-1684.74	40.1457463	-104.5566338	10.40	
7599.00	86.240	2.230	6978.54	937.77	672.03	-1681.88	40.1460039	-104.5566199	9.47	

WELLPATH DATA (186 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7644.75†	87.993	1.256	6980.84	982.60	717.70	-1680.49	40.1461292	-104.5566132	4.38	LP/TPZ on Plan (133'FSL&2633'FWL,SEC.09)
7694.00	89.880	0.210	6981.75	1031.07	766.93	-1679.86	40.1462643	-104.5566091	4.38	
7711.77†	89.874	0.191	6981.79	1048.59	784.70	-1679.80	40.1463131	-104.5566082	0.11	200 'FSL (200'FSL&2634'FWL,SEC.09)
7788.00	89.850	0.110	6981.97	1123.76	860.93	-1679.59	40.1465223	-104.5566046	0.11	
7883.00	89.750	358.530	6982.31	1217.66	955.92	-1680.72	40.1467831	-104.5566050	1.67	
7978.00	89.850	358.940	6982.64	1311.70	1050.90	-1682.82	40.1470439	-104.5566089	0.44	
8073.00	89.780	358.980	6982.94	1405.69	1145.88	-1684.54	40.1473046	-104.5566115	0.08	
8168.00	89.910	359.020	6983.20	1499.67	1240.87	-1686.20	40.1475654	-104.5566138	0.14	
8262.00	89.820	358.900	6983.42	1592.67	1334.85	-1687.91	40.1478234	-104.5566163	0.16	
8357.00	89.910	358.960	6983.65	1686.67	1429.83	-1689.68	40.1480842	-104.5566190	0.11	
8452.00	90.060	359.100	6983.67	1780.64	1524.82	-1691.29	40.1483450	-104.5566212	0.22	



Actual Wellpath Report

GIG-EM STATE Y9-751 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-751
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51836
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-751 AWB
Slot	SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)		

WELLPATH DATA (186 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8547.00	89.940	358.840	6983.67	1874.63	1619.81	-1693.00	40.1486057	-104.5566237	0.30	
8641.00	89.940	359.220	6983.77	1967.61	1713.79	-1694.59	40.1488638	-104.5566258	0.40	
8736.00	90.120	359.280	6983.72	2061.53	1808.78	-1695.83	40.1491245	-104.5566266	0.20	
8831.00	90.090	359.240	6983.55	2155.45	1903.78	-1697.06	40.1493853	-104.5566274	0.05	
8926.00	89.970	359.060	6983.50	2249.39	1998.77	-1698.47	40.1496461	-104.5566288	0.23	
9020.00	89.780	359.080	6983.70	2342.36	2092.75	-1699.99	40.1499041	-104.5566307	0.20	
9115.00	89.970	358.940	6983.91	2436.34	2187.74	-1701.64	40.1501649	-104.5566329	0.25	
9210.00	90.090	359.280	6983.86	2530.30	2282.73	-1703.11	40.1504257	-104.5566346	0.38	
9305.00	90.000	359.010	6983.78	2624.24	2377.72	-1704.53	40.1506864	-104.5566361	0.30	
9400.00	89.780	359.260	6983.97	2718.19	2472.70	-1705.96	40.1509472	-104.5566376	0.35	
9494.00	89.880	359.160	6984.25	2811.13	2566.70	-1707.26	40.1512052	-104.5566386	0.15	
9589.00	90.770	359.530	6983.71	2905.02	2661.69	-1708.35	40.1514660	-104.5566389	1.01	
9684.00	89.660	358.870	6983.35	2998.95	2756.67	-1709.67	40.1517268	-104.5566400	1.36	
9779.00	89.910	359.040	6983.71	3092.94	2851.66	-1711.40	40.1519875	-104.5566426	0.32	
9874.00	89.910	358.990	6983.86	3186.91	2946.64	-1713.04	40.1522483	-104.5566448	0.05	
9968.00	89.480	358.860	6984.36	3279.92	3040.63	-1714.80	40.1525063	-104.5566476	0.48	
10063.00	89.350	358.360	6985.33	3373.99	3135.59	-1717.11	40.1527671	-104.5566522	0.54	
10158.00	90.060	359.330	6985.82	3468.00	3230.57	-1719.02	40.1530278	-104.5566554	1.27	
10253.00	89.780	359.040	6985.95	3561.94	3325.56	-1720.37	40.1532886	-104.5566567	0.42	
10347.00	89.970	358.850	6986.15	3654.94	3419.54	-1722.10	40.1535466	-104.5566593	0.29	
10442.00	90.090	359.440	6986.10	3748.89	3514.53	-1723.52	40.1538074	-104.5566607	0.63	
10537.00	89.880	358.960	6986.13	3842.82	3609.52	-1724.85	40.1540682	-104.5566619	0.55	
10632.00	90.090	359.490	6986.15	3936.74	3704.51	-1726.13	40.1543289	-104.5566628	0.60	
10727.00	90.090	359.180	6986.00	4030.64	3799.51	-1727.23	40.1545897	-104.5566632	0.33	
10821.00	89.940	359.100	6985.98	4123.60	3893.50	-1728.64	40.1548478	-104.5566646	0.18	
10916.00	90.400	359.520	6985.70	4217.50	3988.49	-1729.79	40.1551085	-104.5566651	0.66	
11011.00	89.940	359.280	6985.42	4311.38	4083.48	-1730.78	40.1553693	-104.5566651	0.55	
11106.00	89.750	359.010	6985.67	4405.32	4178.47	-1732.20	40.1556301	-104.5566665	0.35	
11200.00	90.030	359.410	6985.85	4498.26	4272.46	-1733.50	40.1558881	-104.5566676	0.52	
11295.00	90.060	359.290	6985.78	4592.16	4367.46	-1734.57	40.1561489	-104.5566678	0.13	
11390.00	89.820	358.440	6985.88	4686.17	4462.44	-1736.46	40.1564096	-104.5566709	0.93	
11485.00	89.970	359.340	6986.05	4780.17	4557.42	-1738.30	40.1566704	-104.5566739	0.96	
11580.00	90.060	359.390	6986.03	4874.06	4652.41	-1739.35	40.1569312	-104.5566741	0.11	
11674.00	90.030	359.450	6985.95	4966.95	4746.41	-1740.30	40.1571892	-104.5566739	0.07	

WELLPATH DATA (186 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11769.00	90.030	359.460	6985.90	5060.82	4841.40	-1741.21	40.1574500	-104.5566735	0.01	
11864.00	89.880	359.200	6985.98	5154.72	4936.40	-1742.32	40.1577108	-104.5566739	0.32	
11959.00	90.000	359.300	6986.08	5248.64	5031.39	-1743.56	40.1579715	-104.5566747	0.16	
12053.00	90.000	359.590	6986.08	5341.52	5125.38	-1744.47	40.1582296	-104.5566744	0.31	
12148.00	89.970	359.310	6986.10	5435.39	5220.38	-1745.38	40.1584903	-104.5566740	0.30	
12337.00	89.970	359.300	6986.20	5622.21	5409.37	-1747.67	40.1590092	-104.5566750	0.01	
12432.00	90.030	359.340	6986.20	5716.11	5504.36	-1748.80	40.1592699	-104.5566754	0.08	
12527.00	89.910	359.000	6986.25	5810.05	5599.35	-1750.18	40.1595307	-104.5566768	0.38	
12622.00	90.000	359.400	6986.33	5903.98	5694.34	-1751.50	40.1597915	-104.5566779	0.43	
12717.00	90.180	359.140	6986.18	5997.89	5789.33	-1752.71	40.1600523	-104.5566786	0.33	
12906.00	89.940	359.060	6985.98	6184.81	5978.31	-1755.68	40.1605711	-104.5566820	0.13	



Actual Wellpath Report

GIG-EM STATE Y9-751 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-751
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51836
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-751 AWB
Slot	SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)		

WELLPATH DATA (186 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13001.00	89.970	359.380	6986.05	6278.74	6073.30	-1756.98	40.1608318	-104.5566830	0.34	
13096.00	90.090	359.490	6986.00	6372.61	6168.29	-1757.91	40.1610926	-104.5566828	0.17	
13190.00	89.910	359.280	6986.00	6465.51	6262.29	-1758.92	40.1613506	-104.5566828	0.29	
13285.00	90.060	359.460	6986.03	6559.40	6357.28	-1759.97	40.1616114	-104.5566829	0.25	
13380.00	89.970	359.170	6986.00	6653.30	6452.28	-1761.10	40.1618722	-104.5566834	0.32	
13475.00	90.060	359.350	6985.98	6747.22	6547.27	-1762.33	40.1621330	-104.5566842	0.21	
13570.00	90.150	359.610	6985.81	6841.08	6642.26	-1763.19	40.1623937	-104.5566836	0.29	
13664.00	90.280	0.770	6985.45	6933.76	6736.26	-1762.88	40.1626517	-104.5566789	1.24	
13759.00	89.940	0.490	6985.27	7027.31	6831.25	-1761.84	40.1629125	-104.5566716	0.46	
13854.00	89.970	0.280	6985.34	7120.92	6926.25	-1761.20	40.1631732	-104.5566657	0.22	
13949.00	89.910	0.450	6985.44	7214.55	7021.25	-1760.59	40.1634339	-104.5566599	0.19	
14043.00	89.820	0.120	6985.67	7307.21	7115.25	-1760.12	40.1636919	-104.5566546	0.36	
14138.00	90.030	0.710	6985.79	7400.81	7210.25	-1759.44	40.1639527	-104.5566486	0.66	
14233.00	89.970	0.540	6985.79	7494.36	7305.24	-1758.40	40.1642134	-104.5566412	0.19	
14328.00	90.000	0.920	6985.81	7587.88	7400.23	-1757.19	40.1644741	-104.5566333	0.40	
14422.00	90.030	0.480	6985.79	7680.42	7494.22	-1756.04	40.1647320	-104.5566256	0.47	
14517.00	89.940	0.930	6985.82	7773.95	7589.22	-1754.87	40.1649928	-104.5566178	0.48	
14612.00	89.850	0.210	6985.99	7867.51	7684.21	-1753.93	40.1652535	-104.5566108	0.76	
14707.00	89.970	0.300	6986.14	7961.17	7779.21	-1753.50	40.1655142	-104.5566057	0.16	
14802.00	89.970	0.440	6986.19	8054.79	7874.21	-1752.89	40.1657750	-104.5565999	0.15	
14896.00	89.910	0.140	6986.29	8147.45	7968.21	-1752.42	40.1660330	-104.5565946	0.33	
14991.00	89.850	359.310	6986.49	8241.24	8063.21	-1752.87	40.1662937	-104.5565926	0.88	
15086.00	89.880	0.280	6986.71	8335.02	8158.20	-1753.21	40.1665545	-104.5565902	1.02	
15181.00	89.880	0.120	6986.91	8428.69	8253.20	-1752.88	40.1668152	-104.5565854	0.17	
15275.00	89.910	359.690	6987.08	8521.45	8347.20	-1753.04	40.1670733	-104.5565824	0.46	
15370.00	89.880	359.210	6987.25	8615.32	8442.20	-1753.95	40.1673340	-104.5565820	0.51	
15465.00	90.090	0.560	6987.28	8709.07	8537.19	-1754.14	40.1675948	-104.5565791	1.44	
15560.00	90.030	0.830	6987.18	8802.60	8632.19	-1752.99	40.1678555	-104.5565714	0.29	
15654.00	90.060	0.740	6987.11	8895.12	8726.18	-1751.70	40.1681135	-104.5565632	0.10	
15749.00	90.030	0.200	6987.03	8988.71	8821.17	-1750.92	40.1683742	-104.5565568	0.57	
15844.00	89.910	359.240	6987.08	9082.51	8916.17	-1751.38	40.1686350	-104.5565548	1.02	
15939.00	90.150	359.790	6987.03	9176.36	9011.17	-1752.19	40.1688957	-104.5565541	0.63	
16034.00	89.970	359.480	6986.93	9270.18	9106.17	-1752.79	40.1691565	-104.5565526	0.38	
16128.00	89.910	359.560	6987.03	9363.04	9200.16	-1753.58	40.1694145	-104.5565519	0.11	

WELLPATH DATA (186 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16223.00	89.850	359.310	6987.23	9456.91	9295.16	-1754.52	40.1696753	-104.5565516	0.27	
16318.00	89.910	358.750	6987.43	9550.88	9390.14	-1756.12	40.1699361	-104.5565537	0.59	
16413.00	89.940	359.530	6987.55	9644.83	9485.13	-1757.55	40.1701968	-104.5565552	0.82	
16508.00	89.880	359.330	6987.70	9738.70	9580.13	-1758.50	40.1704576	-104.5565550	0.22	
16603.00	90.060	359.610	6987.75	9832.57	9675.12	-1759.37	40.1707184	-104.5565545	0.35	
16698.00	90.220	359.540	6987.52	9926.40	9770.12	-1760.08	40.1709792	-104.5565534	0.18	
16792.00	90.250	359.500	6987.13	10019.26	9864.12	-1760.87	40.1712372	-104.5565527	0.05	
16887.00	90.340	359.820	6986.65	10113.08	9959.11	-1761.43	40.1714980	-104.5565511	0.35	
16982.00	90.220	359.530	6986.18	10206.89	10054.11	-1761.97	40.1717587	-104.5565494	0.33	
17077.00	90.220	359.530	6985.82	10300.73	10149.11	-1762.75	40.1720195	-104.5565485	0.00	
17171.00	90.310	359.860	6985.38	10393.55	10243.10	-1763.25	40.1722775	-104.5565468	0.36	



Actual Wellpath Report

GIG-EM STATE Y9-751 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-751
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51836
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-751 AWB
Slot	SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)		

WELLPATH DATA (186 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
17266.00	90.250	359.600	6984.92	10487.34	10338.10	-1763.70	40.1725383	-104.5565447	0.28	
17361.00	90.220	359.430	6984.53	10581.19	10433.10	-1764.50	40.1727991	-104.5565440	0.18	
17456.00	90.060	359.480	6984.30	10675.06	10528.09	-1765.40	40.1730599	-104.5565436	0.18	
17558.04†	90.261	359.392	6984.01	10775.89	10630.13	-1766.41	40.1733400	-104.5565433	0.22	Cross 460' Hardline (460'FNL&2587'FWL,SEC.04)
17583.00	90.310	359.370	6983.89	10800.56	10655.09	-1766.68	40.1734085	-104.5565433	0.22	Last BH MWD Survey (435'FNL&'2587'FWL,SEC.04)
17608.00‡	90.310	359.370	6983.75	10825.26	10680.08	-1766.95	40.1734771	-104.5565434	0.00	Projection to Bit (410'FNL&2587'FWL,SEC.04)

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Rubicon State Y16-718 SECTION 4	-5.00	-1.17	66.71	3265469.02	1296762.33	40.1441048	-104.5503914	polygon
	2D Polygon: dimensions not calculated							
Rubicon State Y16-718 SECTION 9	-5.00	-1.17	66.71	3265469.02	1296762.33	40.1441048	-104.5503914	polygon
	2D Polygon: dimensions not calculated							
HULLABALOO Y21-787 SECTION 16	58.00	130.78	-3459.90	3261942.56	1296894.28	40.1445700	-104.5630000	polygon
	2D Polygon: dimensions not calculated							
GIG-EM STATE Y9-751 BHL (300'FNL & 2585'FWL,SEC.04)	6983.00	10790.13	-1766.65	3263635.74	1307553.16	40.1737791	-104.5565381	point
GIG-EM STATE Y9-751 BHL 2(300'FNL & 2585'FWL,SEC.04)	6983.00	10790.44	-1767.18	3263635.21	1307553.47	40.1737800	-104.5565400	point
GIG-EM STATE Y9-751 BPZ 2(460'FNL & 2585'FWL,SEC.04)	6983.00	10630.13	-1768.27	3263634.12	1307393.16	40.1733400	-104.5565500	point
GIG-EM STATE Y9-751 LP /TPZ (133'FSL & 2606'FWL,SEC.09)	6983.00	716.96	-1706.16	3263696.23	1297480.42	40.1461279	-104.5567051	point
GIG-EM STATE Y9-751 LP /TPZ 2(133'FSL & 2606'FWL,SEC.09)	6983.00	717.70	-1707.54	3263694.85	1297481.16	40.1461300	-104.5567100	point
406N Hardline 460'FNL&FWL	7230.00	-11.21	-1733.34	3263669.05	1296752.29	40.1441300	-104.5568300	polygon
	2D Polygon: dimensions not calculated							



Actual Wellpath Report

GIG-EM STATE Y9-751 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-751
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51836
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-751 AWB
Slot	SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)		

WELLPATH COMPOSITION - Ref Wellbore: GIG-EM STATE Y9-751 AWB Ref Wellpath: GIG-EM STATE Y9-751 AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	2039.00	OWSG MWD rev2 (MS+IFR1)	13.5" Hole EVO OWSG MWD rev2 (MS+IFR1)	GIG-EM STATE Y9-751 AWB	3/9/2023
2039.00	17608.00	OWSG MWD rev2 (MS+IFR1)	8.5" ATC OWSG MWD rev2 (MS+IFR1) <2197-17583>	GIG-EM STATE Y9-751 AWB	3/9/2023



Actual Wellpath Report

GIG-EM STATE Y9-751 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-751
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51836
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-751 AWB
Slot	SLOT#17 GIG-EM STATE Y9-751 (595'FNL&1020'FEL,SEC.16)		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
160.00	0.340	264.730	160.00	1st BH MWD Survey
7644.75	87.993	1.256	6980.84	LP/TPZ on Plan (133'FSL&2633'FWL,SEC.09)
7711.77	89.874	0.191	6981.79	200 'FSL (200'FSL&2634'FWL,SEC.09)
17558.04	90.261	359.392	6984.01	Cross 460' Hardline (460'FNL&2587'FWL,SEC.04)
17583.00	90.310	359.370	6983.89	Last BH MWD Survey (435'FNL&'2587FWL,SEC.04)
17608.00	90.310	359.370	6983.75	Projection to Bit (410'FNL&2587'FWL,SEC.04)