

# NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16)  
 Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GIG-EM STATE Y9-761  
 Facility: SEC.16-T02N-R64W Wellbore: GIG-EM STATE Y9-761 PWB

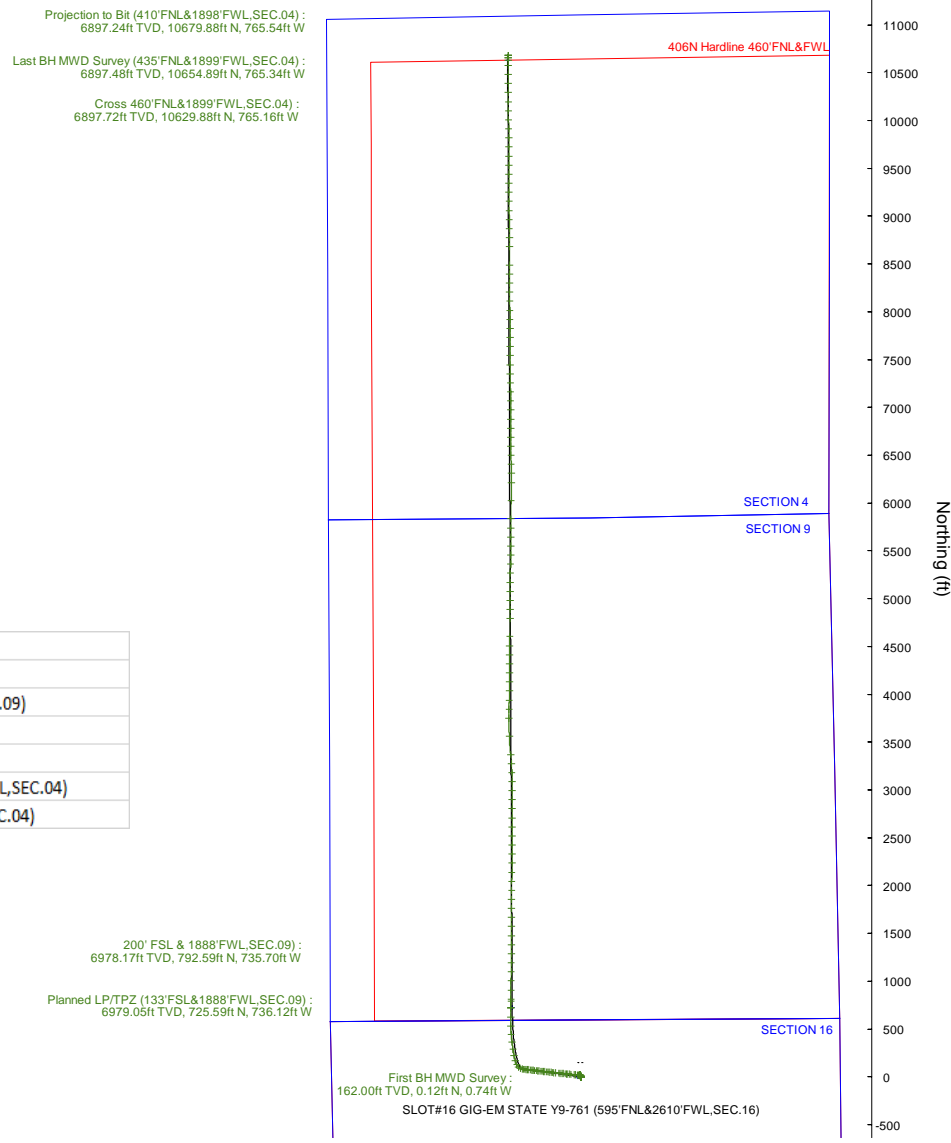
Plot reference wellpath is GIG-EM STATE Y9-761 (REV.E.O) PWP  
 True vertical depths are referenced to P268 (4911'GL+29'KB@4940'RKB) (RKB)  
 Reference wellpath measured depths are referenced to P268 (4911'GL+29'KB@4940'RKB) (RKB)  
 P268 (4911'GL+29'KB@4940'RKB) (RKB) to Mean Sea Level: 4940 feet  
 Mean Sea Level to Ground level (At Slot: SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,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: guenaler on 2023-03-09; 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#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16)	-141.52	1771.30	3263713.779	1296752.763	40°08'38.8680"N	104°33'24.0120"W
P268 (4911'GL+29'KB@4940'RKB) (RKB) to Ground level (At Slot: SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16))				4940ft		
Mean Sea Level to Ground level (At Slot: SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16))				0ft		
P268 (4911'GL+29'KB@4940'RKB) (RKB) to Mean Sea Level				4940ft		



Scale 1 inch = 500 Easting (ft)  
 -5000 -4000 -3000 -2000 -1000 0 1000 2000 3000



MD (ft)	INC (deg)	AZ (deg)	TVD (ft)	Local N (ft)	Local E (ft)	Comment
162	0.53	278.84	162	0.12	-0.74	First BH MWD Survey
7412.84	90.768	0.367	6979.05	725.59	-736.12	Planned LP/TPZ (133'FSL&1888'FWL,SEC.09)
7479.84	90.746	0.339	6978.17	792.59	-735.7	200' FSL & 1888'FWL,SEC.09)
17318.99	90.54	359.598	6897.72	10629.88	-765.16	Cross 460'FNL&1899'FWL,SEC.04)
17344	90.55	359.55	6897.48	10654.89	-765.34	Last BH MWD Survey (435'FNL&1899'FWL,SEC.04)
17369	90.55	359.55	6897.24	10679.88	-765.54	Projection to Bit (410'FNL&1898'FWL,SEC.04)



# Actual Wellpath Report

GIG-EM STATE Y9-761 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-761
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-761 AWP
Slot	SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,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	3/9/2023 at 2:47:14 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	-141.52	1771.30	3263713.78	1296752.76	40.1441300°	-104.5566700°
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 (4911'GL+29'KB@4940'RKB) (RKB) to Facility Vertical Datum	4940.00ft
Horizontal Reference Pt	Slot	P268 (4911'GL+29'KB@4940'RKB) (RKB) to Mean Sea Level	4940.00ft
Vertical Reference Pt	P268 (4911'GL+29'KB@4940'RKB) (RKB)	P268 (4911'GL+29'KB@4940'RKB) (RKB) to Ground Level at Slot (SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16))	4940.00ft
MD Reference Pt	P268 (4911'GL+29'KB@4940'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	355.88°



# Actual Wellpath Report

GIG-EM STATE Y9-761 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-761
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-761 AWP
Slot	SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16)		

WELLPATH DATA (180 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	278.840	0.00	0.00	0.00	0.00	40.1441300	-104.5566700	0.00	
162.00	0.530	278.840	162.00	0.17	0.12	-0.74	40.1441303	-104.5566726	0.33	First BH MWD Survey
251.00	0.450	274.640	250.99	0.31	0.21	-1.50	40.1441306	-104.5566753	0.10	
341.00	0.970	285.210	340.99	0.62	0.44	-2.58	40.1441313	-104.5566792	0.59	
436.00	0.820	313.340	435.98	1.39	1.11	-3.85	40.1441332	-104.5566837	0.48	
530.00	0.620	330.450	529.97	2.34	2.02	-4.59	40.1441357	-104.5566864	0.31	
625.00	0.350	12.430	624.97	3.08	2.75	-4.78	40.1441377	-104.5566870	0.45	
719.00	0.330	26.930	718.96	3.59	3.27	-4.60	40.1441391	-104.5566863	0.09	
814.00	0.280	39.140	813.96	3.99	3.69	-4.33	40.1441403	-104.5566853	0.09	
908.00	0.170	23.880	907.96	4.29	4.00	-4.13	40.1441411	-104.5566846	0.13	
1003.00	0.090	66.820	1002.96	4.43	4.16	-4.00	40.1441415	-104.5566842	0.13	
1097.00	0.060	87.430	1096.96	4.46	4.19	-3.89	40.1441416	-104.5566837	0.04	
1192.00	0.220	329.450	1191.96	4.62	4.35	-3.93	40.1441420	-104.5566839	0.27	
1286.00	0.250	320.590	1285.96	4.95	4.66	-4.15	40.1441429	-104.5566847	0.05	
1381.00	0.390	311.890	1380.96	5.35	5.04	-4.52	40.1441440	-104.5566860	0.16	
1475.00	0.690	320.920	1474.95	6.04	5.69	-5.12	40.1441458	-104.5566881	0.33	
1570.00	1.070	318.590	1569.94	7.22	6.80	-6.06	40.1441488	-104.5566914	0.40	
1665.00	1.730	320.520	1664.91	9.09	8.57	-7.56	40.1441537	-104.5566967	0.70	
1760.00	1.840	321.870	1759.87	11.53	10.88	-9.42	40.1441601	-104.5567033	0.12	
1855.00	1.530	331.720	1854.83	13.95	13.19	-10.96	40.1441665	-104.5567087	0.45	
1949.00	1.040	320.310	1948.80	15.79	14.96	-12.10	40.1441714	-104.5567127	0.59	
2044.00	0.790	299.540	2043.79	16.85	15.94	-13.22	40.1441741	-104.5567167	0.43	
2097.00	0.140	207.780	2096.79	17.00	16.07	-13.57	40.1441745	-104.5567179	1.52	
2192.00	0.220	292.460	2191.79	16.98	16.03	-13.79	40.1441744	-104.5567187	0.26	
2287.00	0.090	137.520	2286.79	17.01	16.05	-13.91	40.1441745	-104.5567191	0.32	
2382.00	0.470	262.720	2381.79	16.93	15.94	-14.24	40.1441742	-104.5567203	0.55	
2476.00	1.700	273.550	2475.77	17.09	15.98	-16.02	40.1441743	-104.5567267	1.32	
2571.00	2.810	277.480	2570.69	17.75	16.37	-19.73	40.1441755	-104.5567400	1.18	
2666.00	4.180	276.570	2665.52	18.86	17.07	-25.48	40.1441776	-104.5567605	1.44	
2761.00	5.810	275.620	2760.15	20.31	17.94	-33.71	40.1441802	-104.5567899	1.72	
2856.00	8.120	275.710	2854.44	22.27	19.08	-45.17	40.1441837	-104.5568308	2.43	
2950.00	10.090	274.610	2947.26	24.66	20.40	-59.99	40.1441877	-104.5568838	2.10	
3045.00	10.190	274.750	3040.77	27.22	21.76	-76.65	40.1441920	-104.5569433	0.11	
3235.00	9.750	276.580	3227.90	32.80	25.00	-109.39	40.1442018	-104.5570603	0.29	
3329.00	9.990	275.360	3320.51	35.62	26.67	-125.41	40.1442069	-104.5571175	0.34	
3424.00	9.160	277.030	3414.19	38.44	28.37	-141.12	40.1442120	-104.5571737	0.92	
3519.00	8.830	275.520	3508.02	41.13	29.99	-155.88	40.1442169	-104.5572264	0.43	
3614.00	10.170	275.870	3601.71	43.80	31.55	-171.48	40.1442216	-104.5572821	1.41	
3708.00	9.940	275.890	3694.27	46.66	33.23	-187.81	40.1442267	-104.5573405	0.24	
3803.00	10.000	276.120	3787.84	49.55	34.96	-204.17	40.1442319	-104.5573989	0.08	
3898.00	10.100	276.630	3881.38	52.57	36.80	-220.64	40.1442374	-104.5574578	0.14	
3993.00	10.280	276.010	3974.88	55.62	38.65	-237.35	40.1442430	-104.5575174	0.22	
4182.00	10.160	275.440	4160.88	61.35	41.99	-270.71	40.1442532	-104.5576367	0.08	
4277.00	10.310	276.930	4254.37	64.37	43.81	-287.49	40.1442586	-104.5576966	0.32	
4372.00	9.460	276.990	4347.96	67.51	45.79	-303.68	40.1442645	-104.5577544	0.89	



# Actual Wellpath Report

GIG-EM STATE Y9-761 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-761
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-761 AWP
Slot	SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16)		

WELLPATH DATA (180 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4467.00	9.400	276.000	4441.67	70.38	47.55	-319.15	40.1442698	-104.5578097	0.18	
4561.00	9.490	276.850	4534.40	73.20	49.28	-334.47	40.1442750	-104.5578644	0.18	
4656.00	9.320	276.540	4628.12	76.12	51.09	-349.89	40.1442804	-104.5579195	0.19	
4751.00	9.460	276.350	4721.85	78.96	52.83	-365.29	40.1442857	-104.5579745	0.15	
4846.00	9.210	275.760	4815.59	81.68	54.45	-380.62	40.1442906	-104.5580293	0.28	
4941.00	9.490	276.390	4909.33	84.42	56.09	-395.96	40.1442955	-104.5580841	0.31	
5035.00	9.280	276.970	5002.07	87.29	57.87	-411.19	40.1443008	-104.5581385	0.25	
5130.00	9.370	275.840	5095.82	90.10	59.58	-426.48	40.1443060	-104.5581931	0.21	
5225.00	9.330	276.520	5189.55	92.86	61.25	-441.83	40.1443110	-104.5582480	0.12	
5320.00	9.250	276.480	5283.31	95.69	62.98	-457.07	40.1443162	-104.5583024	0.08	
5414.00	9.280	276.260	5376.08	98.45	64.66	-472.11	40.1443213	-104.5583561	0.05	
5509.00	9.370	276.260	5469.83	101.22	66.34	-487.41	40.1443263	-104.5584108	0.09	
5604.00	9.270	276.350	5563.57	104.01	68.03	-502.70	40.1443314	-104.5584654	0.11	
5699.00	9.330	276.080	5657.32	106.76	69.69	-517.96	40.1443364	-104.5585199	0.08	
5794.00	9.200	276.810	5751.08	109.57	71.41	-533.16	40.1443416	-104.5585742	0.18	
5889.00	9.330	276.070	5844.84	112.37	73.12	-548.36	40.1443467	-104.5586285	0.19	
5984.00	9.210	276.280	5938.60	115.11	74.77	-563.57	40.1443517	-104.5586829	0.13	
6078.00	8.490	276.140	6031.48	117.70	76.33	-577.95	40.1443564	-104.5587342	0.77	
6173.00	8.500	275.860	6125.44	120.17	77.80	-591.91	40.1443608	-104.5587841	0.04	
6268.00	8.360	276.210	6219.42	122.62	79.26	-605.76	40.1443652	-104.5588336	0.16	
6363.00	9.270	276.050	6313.29	125.21	80.82	-620.23	40.1443699	-104.5588853	0.96	
6458.00	13.140	291.350	6406.48	131.21	85.56	-637.91	40.1443835	-104.5589483	5.10	
6552.00	16.020	318.780	6497.55	146.18	99.22	-656.43	40.1444215	-104.5590141	7.87	
6647.00	23.800	329.390	6586.84	173.84	125.63	-674.87	40.1444945	-104.5590790	9.00	
6742.00	31.930	344.420	6670.85	215.74	166.44	-691.42	40.1446070	-104.5591367	11.25	
6837.00	41.670	349.190	6746.85	271.87	221.81	-704.12	40.1447594	-104.5591800	10.68	
6932.00	47.460	350.890	6814.50	338.16	287.44	-715.60	40.1449399	-104.5592186	6.22	
7027.00	55.990	352.040	6873.30	412.45	361.13	-726.61	40.1451424	-104.5592552	9.03	
7121.00	65.080	357.160	6919.51	494.15	442.50	-734.14	40.1453660	-104.5592790	10.77	
7216.00	73.640	359.800	6952.97	582.87	531.28	-736.44	40.1456098	-104.5592838	9.38	
7311.00	81.900	0.080	6973.08	675.40	624.04	-736.53	40.1458644	-104.5592807	8.70	
7406.00	90.770	0.370	6979.14	769.84	718.75	-736.16	40.1461243	-104.5592757	9.34	
7412.84†	90.768	0.367	6979.05	776.65	725.59	-736.12	40.1461431	-104.5592753	0.05	Planned LP/TPZ (133'FSL&1888'FWL,SEC.09)
7479.84†	90.746	0.339	6978.17	843.44	792.59	-735.70	40.1463270	-104.5592713	0.05	200' FSL & 1888'FWL,SEC.09)
7500.00	90.740	0.330	6977.91	863.54	812.74	-735.58	40.1463823	-104.5592701	0.05	
7595.00	90.990	0.190	6976.47	958.25	907.73	-735.15	40.1466430	-104.5592650	0.30	
7690.00	90.370	0.150	6975.34	1052.98	1002.72	-734.87	40.1469038	-104.5592603	0.65	
7785.00	90.460	0.110	6974.66	1147.71	1097.72	-734.66	40.1471645	-104.5592560	0.10	
7879.00	90.430	0.340	6973.93	1241.44	1191.72	-734.29	40.1474225	-104.5592511	0.25	
7974.00	90.620	0.350	6973.06	1336.15	1286.71	-733.72	40.1476832	-104.5592454	0.20	
8069.00	90.520	0.350	6972.11	1430.85	1381.71	-733.14	40.1479440	-104.5592398	0.11	
8164.00	90.490	0.550	6971.27	1525.55	1476.70	-732.39	40.1482047	-104.5592335	0.21	
8259.00	90.370	0.380	6970.56	1620.24	1571.69	-731.62	40.1484654	-104.5592271	0.22	
8353.00	90.430	0.270	6969.90	1713.95	1665.69	-731.08	40.1487234	-104.5592216	0.13	
8448.00	90.490	0.460	6969.14	1808.66	1760.68	-730.48	40.1489841	-104.5592159	0.21	



# Actual Wellpath Report

GIG-EM STATE Y9-761 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-761
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-761 AWP
Slot	SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16)		

## WELLPATH DATA (180 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8543.00	90.370	0.380	6968.43	1903.36	1855.68	-729.78	40.1492449	-104.5592098	0.15	
8638.00	90.550	0.480	6967.67	1998.06	1950.67	-729.07	40.1495056	-104.5592036	0.22	
8733.00	90.580	0.500	6966.73	2092.74	2045.67	-728.26	40.1497663	-104.5591971	0.04	
8827.00	90.490	0.330	6965.85	2186.44	2139.66	-727.58	40.1500243	-104.5591911	0.20	
8922.00	90.400	0.300	6965.11	2281.16	2234.65	-727.05	40.1502850	-104.5591856	0.10	
9017.00	90.490	0.510	6964.38	2375.86	2329.65	-726.38	40.1505458	-104.5591796	0.24	
9112.00	90.430	0.580	6963.61	2470.54	2424.64	-725.48	40.1508065	-104.5591728	0.10	
9206.00	90.520	0.470	6962.83	2564.23	2518.63	-724.62	40.1510644	-104.5591661	0.15	
9301.00	90.310	0.490	6962.15	2658.92	2613.63	-723.82	40.1513252	-104.5591597	0.22	
9396.00	90.340	0.610	6961.61	2753.60	2708.62	-722.91	40.1515859	-104.5591528	0.13	
9491.00	90.310	359.850	6961.07	2848.32	2803.62	-722.53	40.1518466	-104.5591479	0.80	
9585.00	89.910	357.610	6960.89	2942.20	2897.59	-724.61	40.1521046	-104.5591517	2.42	
9680.00	90.090	359.570	6960.89	3037.09	2992.56	-726.95	40.1523654	-104.5591565	2.07	
9775.00	89.820	0.290	6960.96	3131.85	3087.56	-727.07	40.1526261	-104.5591533	0.81	
9870.00	89.290	358.990	6961.70	3226.64	3182.55	-727.66	40.1528869	-104.5591518	1.48	
9965.00	89.260	356.360	6962.90	3321.58	3277.45	-731.52	40.1531475	-104.5591620	2.77	
10059.00	90.060	353.930	6963.46	3415.56	3371.11	-739.47	40.1534048	-104.5591869	2.72	
10249.00	90.890	357.560	6961.88	3605.52	3560.54	-753.57	40.1539252	-104.5592301	1.96	
10439.00	91.050	0.730	6958.67	3795.16	3750.47	-756.40	40.1544466	-104.5592331	1.67	
10533.00	90.830	0.340	6957.12	3888.84	3844.45	-755.52	40.1547045	-104.5592264	0.48	
10628.00	90.920	0.670	6955.67	3983.51	3939.44	-754.69	40.1549652	-104.5592198	0.36	
10723.00	91.020	0.560	6954.07	4078.18	4034.42	-753.67	40.1552259	-104.5592125	0.16	
10818.00	90.650	0.260	6952.68	4172.87	4129.41	-752.99	40.1554866	-104.5592065	0.50	
10912.00	90.860	0.630	6951.44	4266.56	4223.40	-752.26	40.1557446	-104.5592003	0.45	
11007.00	90.830	0.510	6950.04	4361.23	4318.38	-751.31	40.1560053	-104.5591933	0.13	
11102.00	90.950	0.620	6948.57	4455.90	4413.37	-750.37	40.1562660	-104.5591864	0.17	
11197.00	90.650	0.520	6947.24	4550.57	4508.35	-749.43	40.1565267	-104.5591794	0.33	
11292.00	90.890	0.640	6945.96	4645.25	4603.34	-748.47	40.1567874	-104.5591723	0.28	
11481.00	90.770	0.260	6943.23	4833.62	4792.31	-746.98	40.1573060	-104.5591598	0.21	
11576.00	91.110	0.590	6941.67	4928.31	4887.30	-746.28	40.1575667	-104.5591537	0.50	
11671.00	91.140	0.880	6939.80	5022.95	4982.27	-745.06	40.1578274	-104.5591458	0.31	
11766.00	90.620	0.720	6938.34	5117.59	5077.25	-743.73	40.1580880	-104.5591374	0.57	
11860.00	90.680	0.530	6937.28	5211.26	5171.24	-742.71	40.1583460	-104.5591302	0.21	
11955.00	90.370	0.340	6936.41	5305.96	5266.23	-741.99	40.1586067	-104.5591240	0.38	
12050.00	90.650	0.790	6935.56	5400.63	5361.22	-741.05	40.1588674	-104.5591170	0.56	
12145.00	90.310	0.350	6934.76	5495.31	5456.21	-740.11	40.1591281	-104.5591100	0.59	
12240.00	90.460	0.520	6934.13	5590.01	5551.21	-739.39	40.1593889	-104.5591039	0.24	
12335.00	90.430	0.290	6933.39	5684.71	5646.20	-738.71	40.1596496	-104.5590979	0.24	
12429.00	90.680	0.600	6932.48	5778.41	5740.20	-737.98	40.1599076	-104.5590917	0.42	
12524.00	90.430	0.680	6931.56	5873.07	5835.19	-736.92	40.1601683	-104.5590843	0.28	
12714.00	90.550	0.590	6929.93	6062.41	6025.17	-734.82	40.1606897	-104.5590695	0.08	
12904.00	90.400	0.240	6928.36	6251.81	6215.15	-733.44	40.1612111	-104.5590574	0.20	
12999.00	90.680	359.470	6927.46	6346.57	6310.15	-733.68	40.1614719	-104.5590546	0.86	
13093.00	90.490	359.610	6926.50	6440.38	6404.14	-734.44	40.1617299	-104.5590538	0.25	
13188.00	90.550	359.220	6925.64	6535.19	6499.13	-735.41	40.1619907	-104.5590536	0.42	



# Actual Wellpath Report

GIG-EM STATE Y9-761 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-761
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-761 AWP
Slot	SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16)		

## WELLPATH DATA (180 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS ["/100ft]	Comments
13283.00	91.570	359.550	6923.88	6630.00	6594.11	-736.43	40.1622514	-104.5590537	1.13	
13377.00	90.430	359.460	6922.24	6723.79	6688.09	-737.24	40.1625094	-104.5590530	1.22	
13472.00	90.220	359.420	6921.70	6818.61	6783.08	-738.17	40.1627702	-104.5590527	0.23	
13567.00	90.280	359.650	6921.29	6913.41	6878.08	-738.94	40.1630309	-104.5590519	0.25	
13662.00	90.060	359.350	6921.01	7008.22	6973.08	-739.77	40.1632917	-104.5590512	0.39	
13757.00	90.220	359.580	6920.77	7103.03	7068.07	-740.65	40.1635525	-104.5590508	0.29	
13852.00	90.220	359.570	6920.41	7197.84	7163.07	-741.36	40.1638133	-104.5590497	0.01	
13947.00	90.370	359.670	6919.92	7292.63	7258.06	-741.99	40.1640740	-104.5590484	0.19	
14041.00	90.120	359.440	6919.52	7386.44	7352.06	-742.72	40.1643321	-104.5590474	0.36	
14136.00	90.060	359.370	6919.37	7481.26	7447.06	-743.70	40.1645928	-104.5590473	0.10	
14231.00	90.340	359.550	6919.04	7576.07	7542.05	-744.60	40.1648536	-104.5590469	0.35	
14326.00	90.250	359.620	6918.55	7670.87	7637.05	-745.29	40.1651144	-104.5590458	0.12	
14421.00	90.280	359.710	6918.11	7765.66	7732.04	-745.84	40.1653751	-104.5590442	0.10	
14516.00	90.150	359.400	6917.75	7860.47	7827.04	-746.58	40.1656359	-104.5590432	0.35	
14610.00	90.150	359.620	6917.51	7954.28	7921.04	-747.38	40.1658939	-104.5590425	0.23	
14705.00	90.150	359.450	6917.26	8049.08	8016.03	-748.16	40.1661547	-104.5590417	0.18	
14800.00	90.180	359.560	6916.98	8143.89	8111.03	-748.98	40.1664155	-104.5590410	0.12	
14895.00	90.220	359.680	6916.65	8238.69	8206.03	-749.61	40.1666763	-104.5590396	0.13	
14990.00	90.150	359.590	6916.35	8333.48	8301.02	-750.21	40.1669370	-104.5590382	0.12	
15085.00	90.120	359.790	6916.12	8428.27	8396.02	-750.73	40.1671978	-104.5590364	0.21	
15179.00	90.150	359.590	6915.90	8522.06	8490.02	-751.23	40.1674558	-104.5590347	0.22	
15369.00	90.090	359.490	6915.50	8711.67	8680.01	-752.76	40.1679774	-104.5590329	0.06	
15464.00	90.120	359.640	6915.33	8806.48	8775.01	-753.48	40.1682382	-104.5590319	0.16	
15558.00	90.550	359.690	6914.78	8900.27	8869.01	-754.03	40.1684962	-104.5590303	0.46	
15653.00	90.620	359.690	6913.81	8995.05	8964.00	-754.54	40.1687569	-104.5590285	0.07	
15748.00	90.550	359.550	6912.84	9089.85	9058.99	-755.17	40.1690177	-104.5590272	0.16	
15843.00	90.460	359.680	6912.00	9184.64	9153.99	-755.81	40.1692785	-104.5590259	0.17	
15938.00	90.460	359.520	6911.24	9279.44	9248.98	-756.48	40.1695392	-104.5590246	0.17	
16033.00	90.620	359.550	6910.34	9374.24	9343.98	-757.25	40.1698000	-104.5590238	0.17	
16127.00	90.370	359.590	6909.53	9468.04	9437.97	-757.95	40.1700580	-104.5590227	0.27	
16222.00	90.550	359.600	6908.77	9562.84	9532.96	-758.62	40.1703188	-104.5590215	0.19	
16317.00	90.580	359.650	6907.83	9657.63	9627.96	-759.25	40.1705795	-104.5590201	0.06	
16412.00	90.490	359.690	6906.95	9752.42	9722.95	-759.79	40.1708403	-104.5590185	0.10	
16507.00	90.650	359.570	6906.00	9847.21	9817.94	-760.41	40.1711011	-104.5590171	0.21	
16602.00	90.520	359.610	6905.03	9942.00	9912.94	-761.09	40.1713618	-104.5590159	0.14	
16696.00	90.520	359.620	6904.18	10035.80	10006.93	-761.72	40.1716198	-104.5590146	0.01	
16791.00	90.800	359.800	6903.08	10130.58	10101.92	-762.20	40.1718806	-104.5590127	0.35	
16886.00	90.620	359.770	6901.91	10225.35	10196.92	-762.55	40.1721414	-104.5590104	0.19	
16981.00	90.460	359.640	6901.01	10320.14	10291.91	-763.04	40.1724021	-104.5590085	0.22	
17076.00	90.710	359.680	6900.04	10414.92	10386.90	-763.61	40.1726629	-104.5590069	0.27	
17171.00	90.490	359.570	6899.05	10509.72	10481.90	-764.23	40.1729236	-104.5590055	0.26	
17266.00	90.520	359.700	6898.21	10604.51	10576.89	-764.83	40.1731844	-104.5590041	0.14	
17318.99†	90.540	359.598	6897.72	10657.38	10629.88	-765.16	40.1733298	-104.5590033	0.20	Cross 460'FNL&1899'FWL,SEC.04)
17344.00	90.550	359.550	6897.48	10682.34	10654.89	-765.34	40.1733985	-104.5590030	0.20	Last BH MWD Survey (435'FNL&1899'FWL,SEC.04)
17369.00‡	90.550	359.550	6897.24	10707.28	10679.88	-765.54	40.1734671	-104.5590027	0.00	Projection to Bit (410'FNL&1898'FWL,SEC.04)

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-761
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-761 AWP
Slot	SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16)		

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	-36.00	9.56	1755.32	3265469.02	1296762.33	40.1441048	-104.5503914	polygon
2D Polygon: dimensions not calculated								
Rubicon State Y16-718 SECTION 9	-36.00	9.56	1755.32	3265469.02	1296762.33	40.1441048	-104.5503914	polygon
2D Polygon: dimensions not calculated								
HULLABALOO Y21-787 SECTION 16	27.00	141.52	-1771.30	3261942.56	1296894.28	40.1445700	-104.5630000	polygon
2D Polygon: dimensions not calculated								
GIG-EM STATE Y9-761 BHL (300'FNL & 1894'FWL,SEC.04)	6895.00	10790.09	-769.81	<b>3262944.01</b>	<b>1307542.39</b>	40.1737697	-104.5590138	point
GIG-EM STATE Y9-761 BHL 2 (300'FNL & 1894'FWL,SEC.04)	6895.00	10790.17	-771.54	3262942.27	1307542.46	<b>40.1737700</b>	<b>-104.5590200</b>	point
GIG-EM STATE Y9-761 BPZ (460'FNL & 1894'FWL,SEC.04)	6896.31	10629.88	-769.84	3262943.97	1307382.19	<b>40.1733300</b>	<b>-104.5590200</b>	point
GIG-EM STATE Y9-761 LP /TPZ (133'FSL & 1901'FWL,SEC.09)	6977.00	723.72	-722.91	<b>3262990.90</b>	<b>1297476.46</b>	40.1461376	-104.5592282	point
GIG-EM STATE Y9-761 LP /TPZ 2 (133'FSL & 1901'FWL,SEC.09)	6977.00	724.59	-723.44	3262990.37	1297477.32	<b>40.1461400</b>	<b>-104.5592300</b>	point
406N Hardline 460'FNL&FWL	7199.00	-0.48	-44.73	3263669.05	1296752.29	40.1441300	-104.5568300	polygon
2D Polygon: dimensions not calculated								

WELLPATH COMPOSITION - Ref Wellbore: GIG-EM STATE Y9-761 AWP    Ref Wellpath: GIG-EM STATE Y9-761 AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	2044.00	OWSG MWD rev2 (MS+IFR1)	13.5" EVO Surface OWSG MWD rev2 (MS+IFR1) <162'-2044'>	GIG-EM STATE Y9-761 AWP	2/17/2023
2044.00	17369.00	OWSG MWD rev2 (MS+IFR1)	8.5" Hole ATC Lucida OWSG MWD rev2 (MS+IFR1) <2097'-17344'>	GIG-EM STATE Y9-761 AWP	2/24/2023

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-761
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-761 AWP
Slot	SLOT#16 GIG-EM STATE Y9-761 (595'FNL&2610'FWL,SEC.16)		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]		Comment
162.00	0.530	278.840	162.00		First BH MWD Survey
7412.84	90.768	0.367	6979.05		Planned LP/TPZ (133'FSL&1888'FWL,SEC.09)
7479.84	90.746	0.339	6978.17		200' FSL & 1888'FWL,SEC.09)
17318.99	90.540	359.598	6897.72		Cross 460'FNL&1899'FWL,SEC.04)
17344.00	90.550	359.550	6897.48		Last BH MWD Survey (435'FNL&1899'FWL,SEC.04)
17369.00	90.550	359.550	6897.24		Projection to Bit (410'FNL&1898'FWL,SEC.04)