

NOBLE ENERGY, INC

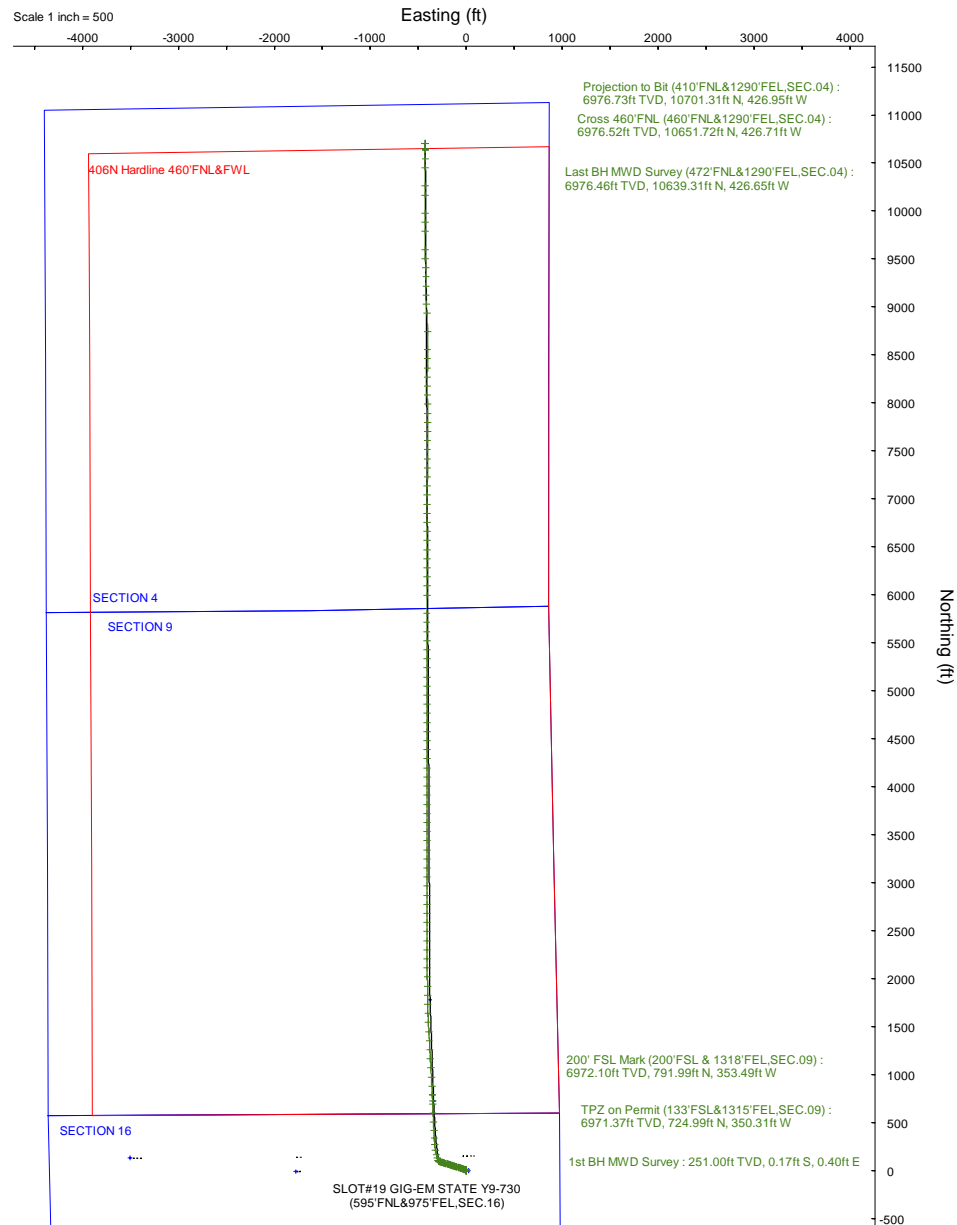
Location: COLORADO Slot: SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16)
 Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GIG-EM STATE Y9-730
 Facility: SEC.16-T02N-R64W Wellbore: GIG-EM STATE Y9-730 PWB

Plot reference wellpath is GIG-EM STATE Y9-730 (REV-E.0) PWP
 True vertical depths are referenced to P268 (4943'GL+29'KB@4972'RKB) (RKB)
 Reference wellpath measured depths are referenced to P268 (4943'GL+29'KB@4972'RKB) (RKB)
 P268 (4943'GL+29'KB@4972'RKB) (RKB) to Mean Sea Level: 4972 feet
 Mean Sea Level to Ground level (At Slot: SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'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: guenaler on 2023-04-05; Database: WA_Denver

Location Information

Facility Name		Grid East (US R)	Grid North (US R)	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 R)	Grid North (US R)	Latitude	Longitude
SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16)	-130.30	3504.63	3265447.040	1296763.977	40°08'38.7960"N	104°33'1.6920"W
P268 (4943'GL+29'KB@4972'RKB) (RKB) to Ground level (At Slot: SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16))				4972ft		
Mean Sea Level to Ground level (At Slot: SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16))				0ft		
P268 (4943'GL+29'KB@4972'RKB) (RKB) to Mean Sea Level				4972ft		





Actual Wellpath Report

GIG-EM STATE Y9-730 AWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51839
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-730 AWB
Slot	SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'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 1:14:45 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	-130.30	3504.63	3265447.04	1296763.98	40.1441100°	-104.5504700°
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 (4943'GL+29'KB@4972'RKB) (RKB) to Facility Vertical Datum	4972.00ft
Horizontal Reference Pt	Slot	P268 (4943'GL+29'KB@4972'RKB) (RKB) to Mean Sea Level	4972.00ft
Vertical Reference Pt	P268 (4943'GL+29'KB@4972'RKB) (RKB)	P268 (4943'GL+29'KB@4972'RKB) (RKB) to Ground Level at Slot (SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16))	4972.00ft
MD Reference Pt	P268 (4943'GL+29'KB@4972'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	357.71°



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51839
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-730 AWB
Slot	SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16)		

WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	113.250	0.00	0.00	0.00	0.00	40.1441100	-104.5504700	0.00	
251.00	0.200	113.250	251.00	-0.19	-0.17	0.40	40.1441095	-104.5504686	0.08	1st BH MWD Survey
342.00	0.080	322.570	342.00	-0.21	-0.19	0.51	40.1441095	-104.5504682	0.30	
437.00	0.230	25.600	437.00	0.02	0.04	0.55	40.1441101	-104.5504680	0.22	
531.00	0.230	301.020	531.00	0.29	0.31	0.47	40.1441108	-104.5504683	0.33	
721.00	0.760	330.810	720.99	1.62	1.60	-0.47	40.1441144	-104.5504716	0.30	
816.00	0.590	335.960	815.98	2.64	2.60	-0.98	40.1441172	-104.5504734	0.19	
911.00	0.490	327.810	910.98	3.44	3.39	-1.39	40.1441193	-104.5504748	0.13	
1005.00	0.440	329.610	1004.98	4.11	4.04	-1.79	40.1441211	-104.5504762	0.06	
1100.00	0.390	337.320	1099.97	4.74	4.66	-2.10	40.1441228	-104.5504773	0.08	
1290.00	0.140	129.590	1289.97	5.19	5.10	-2.17	40.1441241	-104.5504776	0.27	
1480.00	0.520	150.660	1479.97	4.26	4.20	-1.57	40.1441216	-104.5504754	0.21	
1574.00	0.730	168.620	1573.96	3.29	3.25	-1.24	40.1441189	-104.5504743	0.30	
1669.00	0.460	188.680	1668.96	2.32	2.28	-1.18	40.1441163	-104.5504741	0.35	
1764.00	0.390	171.700	1763.96	1.62	1.58	-1.19	40.1441144	-104.5504742	0.15	
1858.00	0.100	192.520	1857.96	1.23	1.18	-1.16	40.1441133	-104.5504741	0.32	
1953.00	0.590	13.630	1952.95	1.62	1.58	-1.06	40.1441144	-104.5504737	0.73	
2041.00	0.650	357.180	2040.95	2.55	2.51	-0.98	40.1441169	-104.5504734	0.21	
2099.00	0.370	303.730	2098.95	2.99	2.95	-1.15	40.1441181	-104.5504740	0.90	
2194.00	0.140	195.610	2193.95	3.06	3.01	-1.44	40.1441183	-104.5504750	0.46	
2289.00	0.120	229.690	2288.95	2.89	2.83	-1.55	40.1441178	-104.5504754	0.08	
2384.00	0.610	54.410	2383.94	3.11	3.06	-1.21	40.1441184	-104.5504742	0.77	
2479.00	2.290	302.620	2478.92	4.47	4.38	-2.40	40.1441221	-104.5504784	2.72	
2573.00	4.420	286.740	2572.76	6.73	6.43	-7.45	40.1441279	-104.5504964	2.45	
2668.00	4.500	287.660	2667.47	9.19	8.62	-14.51	40.1441341	-104.5505216	0.11	
2763.00	4.490	288.550	2762.18	11.78	10.93	-21.58	40.1441406	-104.5505468	0.07	
2858.00	4.540	287.690	2856.88	14.39	13.26	-28.69	40.1441472	-104.5505721	0.09	
2952.00	4.530	288.230	2950.59	16.96	15.55	-35.76	40.1441537	-104.5505973	0.05	
3047.00	4.640	288.250	3045.28	19.63	17.93	-42.97	40.1441605	-104.5506230	0.12	
3142.00	4.500	287.060	3139.98	22.21	20.22	-50.18	40.1441670	-104.5506487	0.18	
3237.00	4.490	287.460	3234.69	24.70	22.43	-57.29	40.1441733	-104.5506741	0.03	
3332.00	4.570	288.020	3329.39	27.27	24.72	-64.44	40.1441797	-104.5506995	0.10	
3426.00	4.440	288.690	3423.10	29.87	27.04	-71.45	40.1441863	-104.5507245	0.15	
3521.00	4.460	288.340	3517.81	32.49	29.38	-78.44	40.1441930	-104.5507494	0.04	

WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3616.00	4.430	288.430	3612.53	35.09	31.71	-85.43	40.1441995	-104.5507743	0.03	
3711.00	4.410	288.220	3707.25	37.67	34.01	-92.38	40.1442061	-104.5507991	0.03	
3806.00	4.430	287.640	3801.96	40.20	36.26	-99.34	40.1442125	-104.5508239	0.05	
3900.00	4.500	288.240	3895.68	42.73	38.52	-106.30	40.1442188	-104.5508487	0.09	
3995.00	4.530	287.710	3990.38	45.32	40.82	-113.42	40.1442254	-104.5508741	0.05	
4090.00	4.480	287.760	4085.09	47.87	43.10	-120.52	40.1442318	-104.5508994	0.05	
4185.00	4.470	287.890	4179.80	50.42	45.37	-127.58	40.1442383	-104.5509246	0.01	
4280.00	4.560	288.350	4274.51	53.03	47.69	-134.69	40.1442449	-104.5509499	0.10	
4374.00	4.470	288.080	4368.21	55.62	50.00	-141.72	40.1442514	-104.5509750	0.10	
4469.00	4.490	287.080	4462.92	58.14	52.25	-148.79	40.1442578	-104.5510002	0.08	
4564.00	4.500	287.430	4557.63	60.63	54.45	-155.90	40.1442641	-104.5510255	0.03	



Actual Wellpath Report

GIG-EM STATE Y9-730 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51839
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-730 AWP
Slot	SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16)		

WELLPATH DATA (177 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
4659.00	4.460	287.360	4652.34	63.13	56.67	-162.98	40.1442703	-104.5510508	0.04	
4754.00	4.460	287.880	4747.05	65.65	58.91	-170.02	40.1442767	-104.5510759	0.04	
4849.00	4.490	286.760	4841.76	68.13	61.12	-177.10	40.1442830	-104.5511011	0.10	
4943.00	4.630	288.210	4935.47	70.66	63.36	-184.23	40.1442893	-104.5511265	0.19	
5038.00	4.490	287.100	5030.17	73.24	65.65	-191.42	40.1442958	-104.5511521	0.17	
5133.00	4.520	288.030	5124.87	75.77	67.91	-198.54	40.1443022	-104.5511775	0.08	
5227.00	4.470	287.700	5218.58	78.31	70.17	-205.55	40.1443086	-104.5512025	0.06	
5322.00	4.400	287.100	5313.30	80.79	72.36	-212.56	40.1443149	-104.5512275	0.09	
5417.00	4.390	287.220	5408.02	83.21	74.51	-219.51	40.1443210	-104.5512523	0.01	
5512.00	4.350	287.230	5502.74	85.63	76.65	-226.43	40.1443271	-104.5512769	0.04	
5606.00	4.390	286.840	5596.47	88.00	78.75	-233.28	40.1443330	-104.5513013	0.05	
5701.00	4.360	286.890	5691.19	90.37	80.85	-240.21	40.1443390	-104.5513261	0.03	
5796.00	4.380	286.670	5785.92	92.74	82.94	-247.14	40.1443449	-104.5513508	0.03	
5891.00	4.400	286.590	5880.64	95.10	85.03	-254.11	40.1443508	-104.5513756	0.02	
5986.00	4.380	286.730	5975.36	97.46	87.11	-261.07	40.1443568	-104.5514004	0.02	
6080.00	4.220	287.460	6069.09	99.80	89.18	-267.81	40.1443627	-104.5514245	0.18	
6175.00	4.420	288.720	6163.82	102.29	91.40	-274.61	40.1443690	-104.5514487	0.23	
6270.00	4.400	288.120	6258.54	104.87	93.71	-281.54	40.1443755	-104.5514734	0.05	
6365.00	4.500	303.530	6353.26	108.32	96.91	-288.11	40.1443845	-104.5514968	1.26	
6459.00	10.620	337.120	6446.44	118.60	106.94	-294.56	40.1444122	-104.5515195	7.77	
6554.00	17.940	342.750	6538.44	140.96	129.01	-302.32	40.1444730	-104.5515464	7.83	
6649.00	26.450	345.750	6626.33	175.86	163.55	-311.88	40.1445681	-104.5515792	9.03	
6743.00	34.520	350.780	6707.28	222.87	210.21	-321.32	40.1446964	-104.5516112	9.00	
6838.00	43.660	355.290	6780.95	282.49	269.61	-328.34	40.1448597	-104.5516341	10.07	
6933.00	52.650	356.380	6844.26	353.15	340.12	-333.43	40.1450534	-104.5516496	9.50	
7028.00	60.820	356.750	6896.33	432.50	419.34	-338.17	40.1452710	-104.5516635	8.61	
7122.00	70.240	357.390	6935.22	517.96	504.69	-342.52	40.1455054	-104.5516758	10.04	
7217.00	79.780	358.200	6959.76	609.62	596.28	-346.04	40.1457569	-104.5516848	10.08	
7312.00	87.600	358.130	6970.20	703.96	690.59	-349.06	40.1460158	-104.5516920	8.23	
7346.45†	88.503	357.698	6971.37	738.39	724.99	-350.31	40.1461103	-104.5516952	2.90	Planned TPZ (133'FSL&1315'FEL,SEC.09)
7407.00	90.090	356.940	6972.11	798.94	785.47	-353.14	40.1462764	-104.5517030	2.90	
7413.53†	90.082	356.930	6972.10	805.46	791.99	-353.49	40.1462943	-104.5517040	0.20	200' FSL Mark (200'FSL & 1318'FEL,SEC.09)
7501.00	89.970	356.790	6972.06	892.92	879.33	-358.28	40.1465342	-104.5517178	0.20	
7596.00	89.910	356.790	6972.16	987.91	974.18	-363.60	40.1467947	-104.5517332	0.06	

WELLPATH DATA (177 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7691.00	89.880	356.750	6972.34	1082.90	1069.03	-368.95	40.1470552	-104.5517487	0.05	
7786.00	90.000	356.720	6972.44	1177.89	1163.88	-374.37	40.1473157	-104.5517645	0.13	
7880.00	89.820	356.800	6972.58	1271.87	1257.72	-379.68	40.1475734	-104.5517799	0.21	
7975.00	89.480	356.500	6973.16	1366.85	1352.56	-385.23	40.1478339	-104.5517961	0.48	
8070.00	89.850	356.990	6973.72	1461.84	1447.41	-390.62	40.1480944	-104.5518118	0.65	
8165.00	89.910	356.720	6973.92	1556.83	1542.26	-395.84	40.1483549	-104.5518268	0.29	
8260.00	90.120	358.990	6973.89	1651.82	1637.19	-399.39	40.1486156	-104.5518359	2.40	
8354.00	89.880	358.870	6973.89	1745.80	1731.17	-401.15	40.1488736	-104.5518386	0.29	
8449.00	90.030	358.910	6973.97	1840.78	1826.15	-402.99	40.1491344	-104.5518415	0.16	
8544.00	89.940	358.830	6973.99	1935.76	1921.14	-404.86	40.1493951	-104.5518446	0.13	
8639.00	89.880	359.490	6974.14	2030.73	2016.13	-406.25	40.1496559	-104.5518459	0.70	



Actual Wellpath Report

GIG-EM STATE Y9-730 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51839
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-730 AWB
Slot	SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16)		

WELLPATH DATA (177 stations)

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8733.00	90.220	359.300	6974.06	2124.69	2110.12	-407.25	40.1499140	-104.5518459	0.41	
8828.00	90.890	0.410	6973.14	2219.62	2205.11	-407.49	40.1501747	-104.5518431	1.36	
8923.00	89.750	359.770	6972.61	2314.53	2300.11	-407.34	40.1504354	-104.5518389	1.38	
9018.00	90.030	359.870	6972.79	2409.47	2395.11	-407.63	40.1506962	-104.5518364	0.31	
9112.00	90.030	359.990	6972.74	2503.40	2489.11	-407.75	40.1509542	-104.5518332	0.13	
9207.00	89.910	0.050	6972.79	2598.32	2584.11	-407.72	40.1512150	-104.5518294	0.14	
9302.00	89.850	359.950	6972.99	2693.24	2679.11	-407.72	40.1514758	-104.5518258	0.12	
9397.00	90.060	359.890	6973.06	2788.17	2774.11	-407.85	40.1517365	-104.5518226	0.23	
9492.00	89.970	359.770	6973.04	2883.11	2869.11	-408.13	40.1519973	-104.5518200	0.16	
9587.00	90.060	359.780	6973.02	2978.05	2964.11	-408.50	40.1522581	-104.5518177	0.10	
9681.00	89.850	359.700	6973.09	3071.99	3058.11	-408.93	40.1525161	-104.5518156	0.24	
9776.00	90.120	0.250	6973.11	3166.91	3153.11	-408.97	40.1527769	-104.5518122	0.64	
9871.00	90.000	359.930	6973.01	3261.83	3248.10	-408.82	40.1530376	-104.5518080	0.36	
9965.00	89.720	359.670	6973.24	3355.77	3342.10	-409.15	40.1532956	-104.5518056	0.41	
10060.00	90.060	359.820	6973.43	3450.71	3437.10	-409.57	40.1535564	-104.5518035	0.39	
10155.00	89.880	359.740	6973.48	3545.65	3532.10	-409.94	40.1538172	-104.5518011	0.21	
10250.00	90.520	0.140	6973.14	3640.57	3627.10	-410.04	40.1540779	-104.5517978	0.79	
10345.00	89.940	0.140	6972.76	3735.49	3722.10	-409.81	40.1543387	-104.5517934	0.61	
10439.00	89.910	359.750	6972.89	3829.41	3816.10	-409.90	40.1545967	-104.5517901	0.42	
10534.00	89.820	359.740	6973.11	3924.35	3911.10	-410.32	40.1548575	-104.5517880	0.10	
10629.00	90.150	359.870	6973.13	4019.29	4006.10	-410.64	40.1551182	-104.5517855	0.37	
10724.00	89.970	0.310	6973.04	4114.21	4101.10	-410.49	40.1553790	-104.5517813	0.50	
10819.00	90.000	0.090	6973.06	4209.12	4196.10	-410.16	40.1556397	-104.5517765	0.23	
10913.00	89.820	0.200	6973.21	4303.03	4290.10	-409.92	40.1558978	-104.5517721	0.22	
11008.00	89.820	0.120	6973.51	4397.95	4385.09	-409.66	40.1561585	-104.5517675	0.08	
11103.00	89.850	359.840	6973.78	4492.87	4480.09	-409.69	40.1564193	-104.5517640	0.30	
11198.00	89.820	359.870	6974.05	4587.81	4575.09	-409.93	40.1566800	-104.5517612	0.04	
11292.00	89.850	359.950	6974.32	4681.74	4669.09	-410.08	40.1569381	-104.5517581	0.09	
11387.00	89.880	359.880	6974.55	4776.67	4764.09	-410.22	40.1571988	-104.5517550	0.08	
11482.00	89.970	359.980	6974.67	4871.60	4859.09	-410.34	40.1574596	-104.5517518	0.14	
11577.00	90.340	0.010	6974.42	4966.52	4954.09	-410.34	40.1577203	-104.5517482	0.39	
11671.00	90.030	359.850	6974.11	5060.45	5048.09	-410.46	40.1579784	-104.5517450	0.37	
11766.00	90.060	359.900	6974.04	5155.38	5143.09	-410.67	40.1582391	-104.5517421	0.06	
11861.00	90.120	0.100	6973.89	5250.30	5238.09	-410.67	40.1584999	-104.5517385	0.22	

WELLPATH DATA (177 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11956.00	89.940	359.680	6973.84	5345.24	5333.09	-410.85	40.1587607	-104.5517355	0.48	
12050.00	90.220	0.230	6973.71	5439.16	5427.09	-410.92	40.1590187	-104.5517322	0.66	
12145.00	89.600	359.080	6973.86	5534.11	5522.09	-411.50	40.1592794	-104.5517306	1.38	
12240.00	90.180	0.170	6974.04	5629.05	5617.08	-412.12	40.1595402	-104.5517292	1.30	
12335.00	90.060	0.050	6973.84	5723.97	5712.08	-411.93	40.1598010	-104.5517249	0.18	
12429.00	90.120	0.180	6973.69	5817.89	5806.08	-411.75	40.1600590	-104.5517206	0.15	
12619.00	90.150	0.150	6973.24	6007.71	5996.08	-411.20	40.1605805	-104.5517114	0.02	
12714.00	90.280	359.910	6972.89	6102.63	6091.08	-411.15	40.1608412	-104.5517076	0.29	
12808.00	90.180	359.970	6972.51	6196.56	6185.08	-411.25	40.1610993	-104.5517043	0.12	
12903.00	90.120	0.210	6972.26	6291.48	6280.08	-411.10	40.1613600	-104.5517001	0.26	
12998.00	90.120	0.060	6972.06	6386.39	6375.08	-410.87	40.1616208	-104.5516957	0.16	



Actual Wellpath Report

GIG-EM STATE Y9-730 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51839
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-730 AWP
Slot	SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16)		

WELLPATH DATA (177 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
13093.00	90.060	359.980	6971.91	6481.32	6470.08	-410.84	40.1618815	-104.5516920	0.11	
13188.00	90.180	0.070	6971.71	6576.24	6565.08	-410.80	40.1621423	-104.5516882	0.16	
13282.00	90.150	0.200	6971.44	6670.16	6659.08	-410.58	40.1624003	-104.5516838	0.14	
13377.00	90.150	0.090	6971.20	6765.07	6754.08	-410.34	40.1626610	-104.5516793	0.12	
13472.00	90.180	0.160	6970.92	6859.98	6849.07	-410.13	40.1629218	-104.5516749	0.08	
13567.00	90.280	0.230	6970.54	6954.89	6944.07	-409.81	40.1631825	-104.5516701	0.13	
13661.00	90.830	0.570	6969.63	7048.79	7038.07	-409.15	40.1634405	-104.5516642	0.69	
13756.00	90.680	1.750	6968.38	7143.60	7133.04	-407.23	40.1637011	-104.5516537	1.25	
13851.00	89.880	359.950	6967.91	7238.46	7228.02	-405.82	40.1639618	-104.5516450	2.07	
13946.00	89.940	0.170	6968.06	7333.38	7323.02	-405.72	40.1642226	-104.5516410	0.24	
14041.00	89.940	0.020	6968.16	7428.29	7418.02	-405.56	40.1644833	-104.5516368	0.16	
14135.00	89.940	0.110	6968.26	7522.22	7512.02	-405.46	40.1647414	-104.5516328	0.10	
14230.00	90.030	0.360	6968.29	7617.12	7607.02	-405.07	40.1650021	-104.5516278	0.28	
14325.00	89.850	359.890	6968.39	7712.04	7702.02	-404.86	40.1652629	-104.5516234	0.53	
14420.00	89.780	0.240	6968.69	7806.96	7797.02	-404.75	40.1655236	-104.5516194	0.38	
14514.00	90.120	0.390	6968.77	7900.86	7891.02	-404.23	40.1657816	-104.5516139	0.40	
14609.00	89.820	358.800	6968.82	7995.81	7986.01	-404.91	40.1660424	-104.5516127	1.70	
14704.00	89.750	359.590	6969.18	8090.77	8081.00	-406.24	40.1663031	-104.5516139	0.83	
14799.00	90.030	0.080	6969.36	8185.71	8176.00	-406.51	40.1665639	-104.5516112	0.59	
14893.00	90.030	0.310	6969.31	8279.62	8270.00	-406.19	40.1668219	-104.5516065	0.24	
14988.00	90.030	0.220	6969.26	8374.53	8365.00	-405.75	40.1670827	-104.5516012	0.09	
15083.00	89.970	0.220	6969.26	8469.43	8460.00	-405.39	40.1673434	-104.5515963	0.06	
15178.00	89.820	359.950	6969.44	8564.35	8555.00	-405.25	40.1676042	-104.5515922	0.33	
15367.00	89.910	0.260	6969.88	8753.19	8743.99	-404.90	40.1681229	-104.5515837	0.17	
15557.00	89.600	356.310	6970.70	8943.14	8933.87	-410.59	40.1686443	-104.5515968	2.09	
15652.00	89.880	355.960	6971.13	9038.10	9028.65	-416.99	40.1689046	-104.5516161	0.47	
15746.00	90.000	0.450	6971.23	9132.07	9122.58	-419.93	40.1691625	-104.5516230	4.78	
15841.00	89.780	0.200	6971.41	9226.97	9217.58	-419.40	40.1694233	-104.5516174	0.35	
15936.00	89.750	359.220	6971.80	9321.91	9312.58	-419.88	40.1696840	-104.5516155	1.03	
16031.00	89.570	358.200	6972.36	9416.90	9407.55	-422.02	40.1699448	-104.5516195	1.09	
16126.00	89.510	355.790	6973.12	9511.88	9502.41	-426.99	40.1702053	-104.5516337	2.54	
16220.00	89.880	0.100	6973.62	9605.86	9596.33	-430.36	40.1704632	-104.5516422	4.60	
16410.00	89.780	0.240	6974.19	9795.68	9786.32	-429.80	40.1709847	-104.5516329	0.09	
16505.00	89.940	0.350	6974.42	9890.58	9881.32	-429.31	40.1712454	-104.5516275	0.20	

WELLPATH DATA (177 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS ["/100ft]	Comments
16600.00	89.940	0.080	6974.52	9985.49	9976.32	-428.96	40.1715062	-104.5516226	0.28	
16789.00	89.780	0.210	6974.98	10174.32	10165.32	-428.48	40.1720250	-104.5516137	0.11	
16884.00	89.780	0.160	6975.35	10269.23	10260.32	-428.17	40.1722857	-104.5516089	0.05	
17074.00	89.820	0.360	6976.01	10459.04	10450.32	-427.31	40.1728072	-104.5515986	0.11	
17169.00	89.940	0.360	6976.21	10553.94	10545.31	-426.71	40.1730679	-104.5515928	0.13	
17263.00	89.750	359.720	6976.46	10647.86	10639.31	-426.65	40.1733259	-104.5515890	0.71	Last BH MWD Survey (472'FNL&1290'FEL,SEC.04)
17275.41†	89.750	359.720	6976.52	10660.27	10651.72	-426.71	40.1733600	-104.5515887	0.00	Cross 460'FNL (460'FNL&1290'FEL,SEC.04)
17325.00‡	89.750	359.720	6976.73	10709.83	10701.31	-426.95	40.1734961	-104.5515877	0.00	Projection to Bit (410'FNL&1290'FEL,SEC.04)



Actual Wellpath Report

GIG-EM STATE Y9-730 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51839
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-730 AWB
Slot	SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,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	-4.00	-1.65	21.98	3265469.02	1296762.33	40.1441048	-104.5503914	polygon
	2D Polygon: dimensions not calculated							
Rubicon State Y16-718 SECTION 9	-4.00	-1.65	21.98	3265469.02	1296762.33	40.1441048	-104.5503914	polygon
	2D Polygon: dimensions not calculated							
HULLABALOO Y21-787 SECTION 16	59.00	130.30	-3504.63	3261942.56	1296894.28	40.1445700	-104.5630000	polygon
	2D Polygon: dimensions not calculated							
GIG-EM STATE Y9-730 AC Inflection Point	6972.00	1777.07	-378.06	3265069.00	1298540.97	40.1489989	-104.5517542	point
GIG-EM STATE Y9-730 BHL (300'FNL & 1292'FEL,SEC.04)	6972.00	10811.20	-427.85	3265019.21	1307574.70	40.1737978	-104.5515867	point
GIG-EM STATE Y9-730 BHL 2(300'FNL & 1292'FEL,SEC.04)	6972.00	10812.00	-428.78	3265018.28	1307575.51	40.1738000	-104.5515900	point
GIG-EM STATE Y9-730 BPZ(460'FNL & 1290'FEL,SEC.04)	6972.00	10651.72	-427.07	3265019.99	1307415.23	40.1733600	-104.5515900	point
GIG-EM STATE Y9-730 LP /TPZ (133'FSL & 1305'FEL,SEC.09)	6972.00	724.37	-340.16	3265106.89	1297488.31	40.1461083	-104.5516589	point
GIG-EM STATE Y9-730 LP /TPZ 2(133'FSL & 1305'FEL,SEC.09)	6972.00	724.99	-340.47	3265106.59	1297488.94	40.1461100	-104.5516600	point
406N Hardline 460'FNL&FWL	7231.00	-11.69	-1778.07	3263669.05	1296752.29	40.1441300	-104.5568300	polygon
	2D Polygon: dimensions not calculated							

WELLPATH COMPOSITION - Ref Wellbore: GIG-EM STATE Y9-730 AWB Ref Wellpath: GIG-EM STATE Y9-730 AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
0.00	2041.00	OWSG MWD rev2 (MS+IFR1)	13.5" Hole EVO OWSG MWD rev2 (MS+IFR1) <251'-2041'>	GIG-EM STATE Y9-730 AWB	3/9/2023
2041.00	17325.00	OWSG MWD rev2 (MS+IFR1)	8.5" ATC OWSG MWD rev2 (MS+IFR1) <2099'-5796	GIG-EM STATE Y9-730 AWB	3/17/2023



Actual Wellpath Report

GIG-EM STATE Y9-730 AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-730
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51839
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-730 AWB
Slot	SLOT#19 GIG-EM STATE Y9-730 (595'FNL&975'FEL,SEC.16)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
251.00	0.200	113.250	251.00	1st BH MWD Survey
7346.45	88.503	357.698	6971.37	Planned TPZ (133'FSL&1315'FEL,SEC.09)
7413.53	90.082	356.930	6972.10	200' FSL Mark (200'FSL & 1318'FEL,SEC.09)
17263.00	89.750	359.720	6976.46	Last BH MWD Survey (472'FNL&1290'FEL,SEC.04)
17275.41	89.750	359.720	6976.52	Cross 460'FNL (460'FNL&1290'FEL,SEC.04)
17325.00	89.750	359.720	6976.73	Projection to Bit (410'FNL&1290'FEL,SEC.04)