

# NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,SEC.16)  
 Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: GIG-EM STATE Y9-772  
 Facility: SEC.16-T02N-R64W Wellbore: GIG-EM STATE Y9-772 PWB

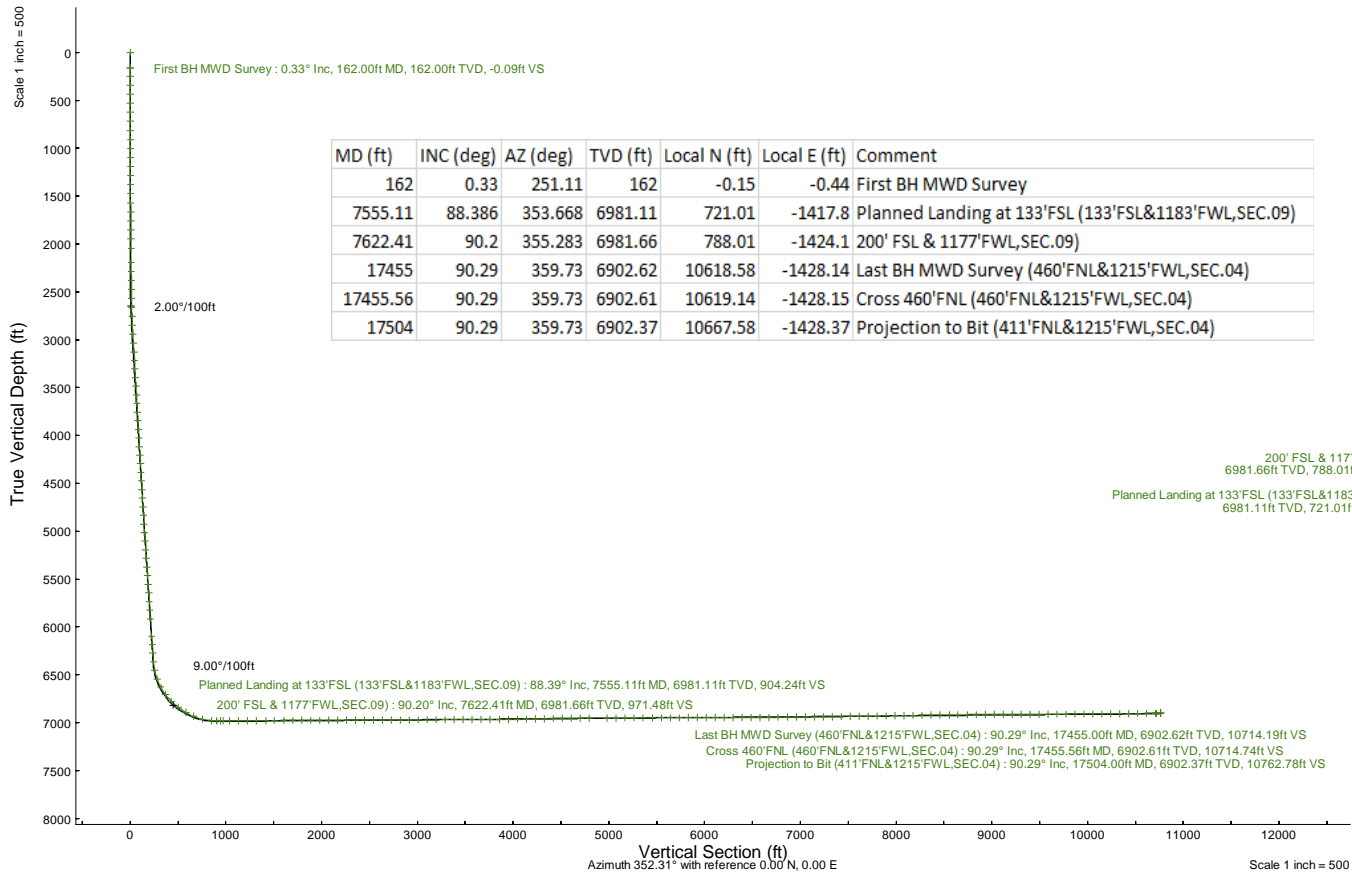
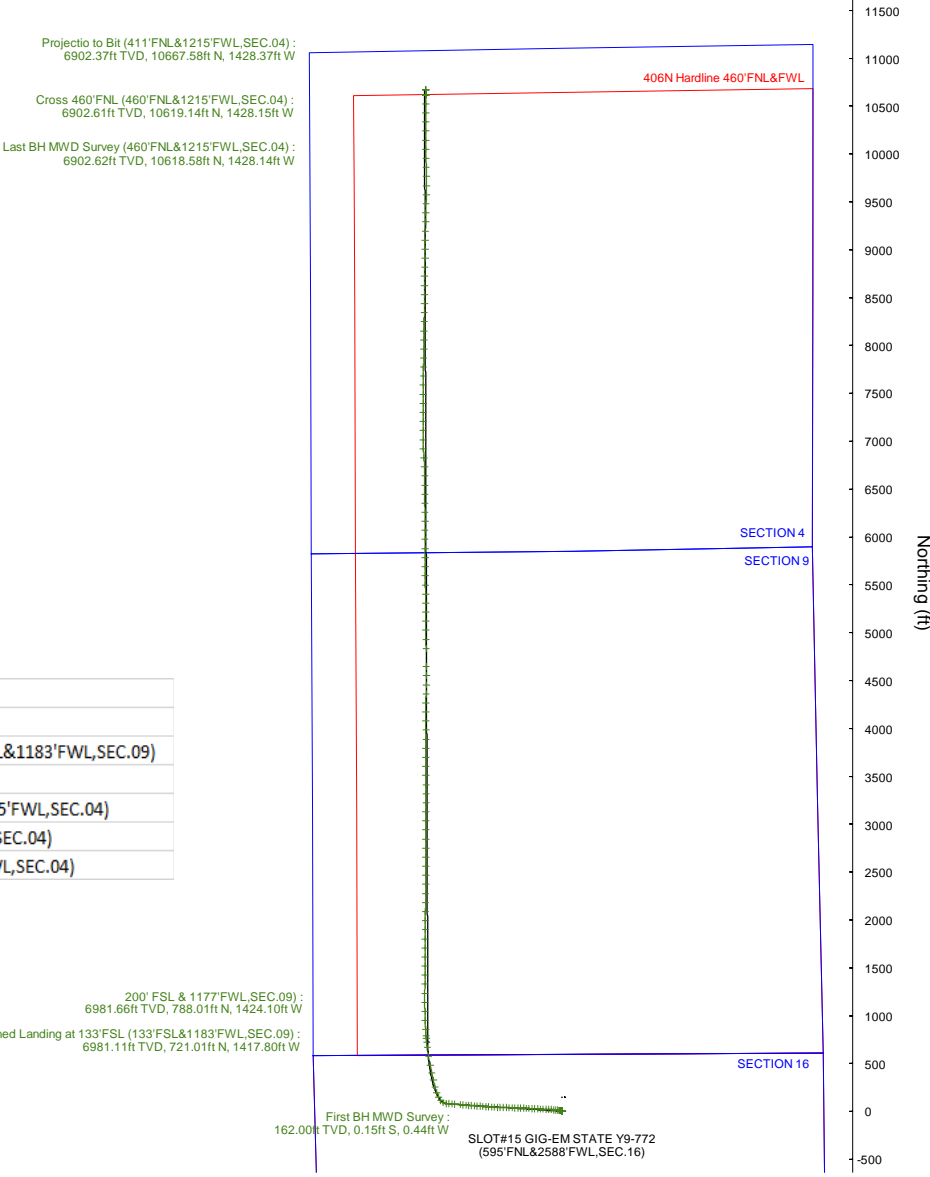
Plot reference wellpath is GIG-EM STATE Y9-772 (REV-E.0) PWP  
 True vertical depths are referenced to P268 (4911'GL+29'KB@4940'RKB) (RKB)  
 Reference wellpath measured depths are referenced to P268 (4911'GL+29'KB@4940'RKB) (RKB)  
 P268 (4911'GL+29'KB@4940'RKB) (RKB) to Mean Sea Level: 4940 feet  
 Mean Sea Level to Ground level (At Slot: SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'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#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,SEC.16)	-141.76	1748.93	3263691.415	1296752.525	40°08'38.8660"N	104°33'24.3000"W
P268 (4911'GL+29'KB@4940'RKB) (RKB) to Ground level (At Slot: SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,SEC.16))				4940ft		
Mean Sea Level to Ground level (At Slot: SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,SEC.16))				0ft		
P268 (4911'GL+29'KB@4940'RKB) (RKB) to Mean Sea Level				4940ft		



Scale 1 inch = 500 Easting (ft)





# Actual Wellpath Report

GIG-EM STATE Y9-772 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51733
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-772 AWB
Slot	SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'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 3:11:05 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	-141.76	1748.93	3263691.42	1296752.53	40.1441300°	-104.5567500°
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#15 GIG-EM STATE Y9-772 (595'FNL&2588'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	352.31°

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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51733
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-772 AWB
Slot	SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,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	251.110	0.00	0.00	0.00	0.00	40.1441300	-104.5567500	0.00	
162.00	0.330	251.110	162.00	-0.09	-0.15	-0.44	40.1441296	-104.5567516	0.20	First BH MWD Survey
251.00	0.300	283.710	251.00	-0.06	-0.18	-0.91	40.1441295	-104.5567533	0.20	
341.00	0.570	308.330	341.00	0.35	0.15	-1.49	40.1441305	-104.5567553	0.36	
436.00	0.520	307.780	435.99	1.00	0.71	-2.20	40.1441320	-104.5567578	0.05	
530.00	0.610	316.220	529.99	1.71	1.33	-2.89	40.1441337	-104.5567603	0.13	
625.00	0.460	343.350	624.98	2.49	2.06	-3.34	40.1441358	-104.5567619	0.31	
719.00	0.320	350.020	718.98	3.13	2.68	-3.50	40.1441375	-104.5567624	0.16	
814.00	0.290	13.320	813.98	3.62	3.18	-3.49	40.1441388	-104.5567624	0.13	
908.00	0.150	11.600	907.98	3.96	3.53	-3.41	40.1441398	-104.5567621	0.15	
1003.00	0.080	306.220	1002.98	4.12	3.69	-3.44	40.1441402	-104.5567622	0.14	
1097.00	0.100	26.360	1096.98	4.23	3.81	-3.45	40.1441405	-104.5567622	0.12	
1192.00	0.110	256.850	1191.98	4.29	3.86	-3.51	40.1441407	-104.5567624	0.20	
1286.00	0.180	241.320	1285.98	4.23	3.77	-3.72	40.1441405	-104.5567632	0.08	
1381.00	0.270	247.620	1380.98	4.12	3.61	-4.06	40.1441400	-104.5567644	0.10	
1475.00	0.540	280.350	1474.97	4.20	3.61	-4.70	40.1441400	-104.5567667	0.37	
1570.00	0.780	298.550	1569.97	4.72	4.00	-5.71	40.1441411	-104.5567703	0.33	
1665.00	1.340	309.930	1664.95	5.93	5.02	-7.13	40.1441440	-104.5567753	0.63	
1760.00	1.020	313.830	1759.93	7.41	6.32	-8.59	40.1441476	-104.5567805	0.35	
1855.00	1.050	322.120	1854.92	8.82	7.59	-9.74	40.1441511	-104.5567845	0.16	
1949.00	0.790	321.190	1948.90	10.12	8.77	-10.67	40.1441544	-104.5567878	0.28	
2044.00	0.520	309.980	2043.90	11.00	9.56	-11.41	40.1441566	-104.5567905	0.31	
2192.00	0.130	210.650	2191.90	11.37	9.85	-12.01	40.1441574	-104.5567926	0.38	
2286.00	0.930	270.760	2285.89	11.40	9.77	-12.83	40.1441572	-104.5567955	0.93	
2381.00	2.590	273.790	2380.84	11.94	9.92	-15.74	40.1441577	-104.5568059	1.75	
2476.00	3.860	272.870	2475.69	12.95	10.22	-21.08	40.1441587	-104.5568250	1.34	
2571.00	5.310	274.040	2570.38	14.43	10.69	-28.66	40.1441602	-104.5568521	1.53	
2666.00	7.080	273.630	2664.83	16.47	11.37	-38.89	40.1441623	-104.5568886	1.86	
2760.00	9.540	273.910	2757.83	19.18	12.27	-52.44	40.1441652	-104.5569371	2.62	
2855.00	11.960	277.720	2851.16	23.37	14.13	-70.05	40.1441708	-104.5570000	2.65	
2950.00	13.660	275.670	2943.79	28.58	16.56	-90.97	40.1441781	-104.5570747	1.85	
3045.00	15.690	275.860	3035.69	34.19	18.98	-114.91	40.1441854	-104.5571603	2.14	
3140.00	17.480	272.860	3126.73	39.81	21.00	-141.94	40.1441918	-104.5572569	2.09	
3234.00	18.210	272.170	3216.21	44.91	22.26	-170.72	40.1441961	-104.5573598	0.81	
3329.00	18.140	272.850	3306.47	50.15	23.56	-200.33	40.1442005	-104.5574656	0.24	
3424.00	18.380	272.510	3396.69	55.51	24.95	-230.06	40.1442052	-104.5575719	0.28	
3519.00	18.100	272.710	3486.91	60.83	26.31	-259.76	40.1442098	-104.5576781	0.30	
3613.00	17.960	273.110	3576.30	66.18	27.78	-288.82	40.1442147	-104.5577820	0.20	
3708.00	18.100	272.590	3666.63	71.56	29.24	-318.19	40.1442196	-104.5578869	0.22	
3803.00	18.080	272.330	3756.94	76.76	30.51	-347.66	40.1442239	-104.5579923	0.09	
3898.00	18.140	272.540	3847.23	81.95	31.76	-377.16	40.1442282	-104.5580978	0.09	
3992.00	18.500	271.970	3936.47	87.05	32.93	-406.68	40.1442322	-104.5582033	0.43	
4087.00	18.340	272.060	4026.60	92.11	33.98	-436.68	40.1442360	-104.5583106	0.17	
4182.00	18.140	272.000	4116.82	97.13	35.03	-466.40	40.1442398	-104.5584168	0.21	
4277.00	18.130	272.080	4207.11	102.13	36.09	-495.95	40.1442435	-104.5585225	0.03	



# Actual Wellpath Report

GIG-EM STATE Y9-772 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51733
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-772 AWB
Slot	SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,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
4371.00	18.910	272.010	4296.24	107.17	37.15	-525.79	40.1442473	-104.5586292	0.83	
4466.00	18.850	271.970	4386.13	112.34	38.22	-556.51	40.1442511	-104.5587390	0.06	
4561.00	19.000	272.640	4475.99	117.69	39.46	-587.30	40.1442554	-104.5588491	0.28	
4656.00	18.860	272.120	4565.85	123.08	40.74	-618.09	40.1442599	-104.5589592	0.23	
4751.00	18.790	272.060	4655.77	128.29	41.86	-648.72	40.1442638	-104.5590687	0.08	
4845.00	18.560	272.630	4744.82	133.53	43.09	-678.80	40.1442681	-104.5591762	0.31	
4940.00	18.590	271.510	4834.87	138.66	44.18	-709.04	40.1442719	-104.5592843	0.38	
5035.00	18.640	271.920	4924.90	143.62	45.09	-739.35	40.1442753	-104.5593927	0.15	
5130.00	18.430	274.300	5014.98	149.27	46.72	-769.50	40.1442807	-104.5595005	0.83	
5224.00	18.720	274.380	5104.08	155.51	48.99	-799.36	40.1442878	-104.5596072	0.31	
5319.00	18.650	274.440	5194.07	161.89	51.33	-829.70	40.1442951	-104.5597156	0.08	
5414.00	18.380	274.250	5284.16	168.18	53.62	-859.78	40.1443022	-104.5598231	0.29	
5509.00	18.350	274.900	5374.32	174.54	56.00	-889.62	40.1443097	-104.5599297	0.22	
5604.00	18.500	274.610	5464.45	181.01	58.49	-919.54	40.1443174	-104.5600367	0.19	
5699.00	18.370	274.260	5554.57	187.32	60.81	-949.49	40.1443246	-104.5601437	0.18	
5793.00	18.160	274.150	5643.84	193.39	62.98	-978.87	40.1443314	-104.5602487	0.23	
5888.00	18.170	274.590	5734.10	199.58	65.23	-1008.40	40.1443384	-104.5603543	0.14	
5983.00	18.170	275.230	5824.37	206.04	67.77	-1037.92	40.1443463	-104.5604597	0.21	
6078.00	18.080	274.590	5914.65	212.49	70.30	-1067.36	40.1443541	-104.5605649	0.23	
6268.00	18.260	274.040	6095.18	224.81	74.75	-1126.44	40.1443680	-104.5607761	0.13	
6362.00	18.250	275.010	6184.45	231.04	77.08	-1155.80	40.1443752	-104.5608810	0.32	
6457.00	17.790	275.380	6274.79	237.60	79.74	-1185.06	40.1443834	-104.5609856	0.50	
6552.00	19.690	275.100	6364.75	244.42	82.52	-1215.46	40.1443919	-104.5610942	2.00	
6647.00	19.510	299.180	6454.39	257.50	91.69	-1245.30	40.1444180	-104.5612005	8.45	
6742.00	21.630	322.500	6543.48	282.26	113.36	-1269.85	40.1444781	-104.5612875	8.85	
6837.00	29.610	333.110	6629.11	319.69	148.25	-1291.17	40.1445745	-104.5613625	9.66	
6931.00	37.160	338.860	6707.56	369.32	195.52	-1311.94	40.1447049	-104.5614350	8.70	
7026.00	45.690	345.240	6778.76	431.10	255.29	-1331.00	40.1448695	-104.5615009	10.01	
7121.00	53.260	347.660	6840.45	502.88	325.45	-1347.82	40.1450626	-104.5615584	8.20	
7216.00	58.440	349.190	6893.77	581.29	402.45	-1363.55	40.1452744	-104.5616118	5.61	
7310.00	68.400	346.960	6935.78	665.01	484.57	-1380.97	40.1455003	-104.5616709	10.81	
7405.00	76.580	351.770	6964.35	755.38	573.53	-1397.59	40.1457450	-104.5617270	9.87	
7500.00	86.240	351.920	6978.52	849.20	666.40	-1410.89	40.1460003	-104.5617711	10.17	
7555.11†	88.386	353.668	6981.11	904.24	721.01	-1417.80	40.1461504	-104.5617937	5.02	Planned Landing at 133'FSL (133'FSL&1183'FWL,SEC.09)
7595.00	89.940	354.930	6981.69	944.10	760.70	-1421.76	40.1462594	-104.5618064	5.02	
7622.41†	90.200	355.283	6981.66	971.48	788.01	-1424.10	40.1463344	-104.5618137	1.60	200' FSL & 1177'FWL,SEC.09)
7689.00	90.830	356.140	6981.06	1037.95	854.41	-1429.08	40.1465168	-104.5618290	1.60	
7784.00	90.280	358.470	6980.14	1132.58	949.29	-1433.54	40.1467774	-104.5618414	2.52	
7879.00	90.460	358.320	6979.52	1227.04	1044.25	-1436.20	40.1470381	-104.5618473	0.25	
7974.00	90.220	359.620	6978.96	1321.40	1139.23	-1437.91	40.1472989	-104.5618498	1.39	
8069.00	90.590	0.780	6978.29	1415.49	1234.23	-1437.58	40.1475596	-104.5618451	1.28	
8163.00	90.310	0.650	6977.55	1508.48	1328.22	-1436.41	40.1478176	-104.5618373	0.33	
8258.00	90.460	0.090	6976.91	1602.54	1423.21	-1435.79	40.1480783	-104.5618315	0.61	
8353.00	90.120	0.540	6976.43	1696.61	1518.21	-1435.27	40.1483391	-104.5618260	0.59	
8448.00	90.490	0.910	6975.93	1790.59	1613.20	-1434.07	40.1485998	-104.5618182	0.55	



# Actual Wellpath Report

GIG-EM STATE Y9-772 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51733
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-772 AWB
Slot	SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,SEC.16)		

WELLPATH DATA (186 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8543.00	89.380	0.400	6976.03	1884.58	1708.19	-1432.98	40.1488605	-104.5618107	1.29	
8637.00	90.180	0.810	6976.39	1977.60	1802.18	-1431.99	40.1491185	-104.5618036	0.96	
8732.00	90.740	0.450	6975.63	2071.59	1897.18	-1430.95	40.1493792	-104.5617962	0.70	
8827.00	90.340	0.010	6974.74	2165.68	1992.17	-1430.56	40.1496399	-104.5617913	0.63	
8922.00	90.340	0.300	6974.17	2259.79	2087.17	-1430.31	40.1499006	-104.5617868	0.31	
9017.00	90.430	0.110	6973.53	2353.89	2182.16	-1429.97	40.1501614	-104.5617819	0.22	
9111.00	90.280	0.280	6972.95	2447.00	2276.16	-1429.65	40.1504194	-104.5617772	0.24	
9206.00	90.220	0.220	6972.54	2541.09	2371.16	-1429.23	40.1506801	-104.5617722	0.09	
9301.00	90.150	359.940	6972.23	2635.21	2466.16	-1429.10	40.1509409	-104.5617681	0.30	
9396.00	89.750	0.390	6972.31	2729.32	2561.16	-1428.83	40.1512016	-104.5617635	0.63	
9490.00	90.520	0.510	6972.09	2822.37	2655.16	-1428.09	40.1514596	-104.5617573	0.83	
9585.00	90.280	0.310	6971.43	2916.42	2750.15	-1427.41	40.1517204	-104.5617513	0.33	
9680.00	90.220	359.680	6971.01	3010.57	2845.15	-1427.42	40.1519811	-104.5617477	0.67	
9775.00	90.150	0.260	6970.71	3104.72	2940.15	-1427.47	40.1522419	-104.5617443	0.61	
9869.00	90.180	0.140	6970.44	3197.83	3034.15	-1427.14	40.1524999	-104.5617396	0.13	
9964.00	91.170	1.260	6969.32	3291.80	3129.13	-1425.98	40.1527606	-104.5617318	1.57	
10059.00	89.780	0.550	6968.53	3385.73	3224.11	-1424.48	40.1530212	-104.5617229	1.64	
10154.00	89.880	0.060	6968.81	3479.81	3319.11	-1423.97	40.1532820	-104.5617175	0.53	
10248.00	90.030	359.500	6968.89	3573.01	3413.11	-1424.33	40.1535400	-104.5617152	0.62	
10343.00	90.680	0.090	6968.30	3667.20	3508.11	-1424.67	40.1538008	-104.5617128	0.92	
10438.00	90.770	359.690	6967.10	3761.36	3603.10	-1424.86	40.1540615	-104.5617099	0.43	
10533.00	90.520	359.590	6966.03	3855.58	3698.09	-1425.45	40.1543223	-104.5617084	0.28	
10628.00	90.370	0.770	6965.29	3949.68	3793.09	-1425.15	40.1545830	-104.5617038	1.25	
10722.00	90.800	0.270	6964.33	4042.71	3887.08	-1424.30	40.1548410	-104.5616971	0.70	
10817.00	91.050	359.660	6962.79	4136.85	3982.06	-1424.36	40.1551017	-104.5616938	0.69	
10912.00	91.340	359.960	6960.81	4231.01	4077.04	-1424.67	40.1553624	-104.5616913	0.44	
11007.00	90.910	359.910	6958.95	4325.16	4172.02	-1424.78	40.1556231	-104.5616881	0.46	
11102.00	91.830	0.270	6956.68	4419.25	4266.99	-1424.63	40.1558838	-104.5616840	1.04	
11196.00	90.570	1.670	6954.71	4512.16	4360.96	-1423.04	40.1561417	-104.5616747	2.00	
11291.00	90.690	359.780	6953.66	4606.12	4455.94	-1421.84	40.1564024	-104.5616668	1.99	
11386.00	89.920	359.620	6953.16	4700.33	4550.94	-1422.34	40.1566631	-104.5616650	0.83	
11481.00	90.350	359.910	6952.93	4794.53	4645.93	-1422.73	40.1569239	-104.5616628	0.55	
11670.00	90.140	359.670	6952.13	4981.92	4834.93	-1423.42	40.1574427	-104.5616581	0.17	
11765.00	90.320	359.260	6951.74	5076.18	4929.93	-1424.31	40.1577035	-104.5616577	0.47	
11860.00	90.600	0.050	6950.98	5170.40	5024.92	-1424.88	40.1579642	-104.5616561	0.88	
11955.00	90.100	359.300	6950.40	5264.61	5119.92	-1425.42	40.1582250	-104.5616545	0.95	
12050.00	90.600	359.630	6949.82	5358.87	5214.91	-1426.30	40.1584858	-104.5616540	0.63	
12145.00	89.980	359.230	6949.34	5453.13	5309.90	-1427.25	40.1587465	-104.5616538	0.78	
12240.00	89.890	359.420	6949.45	5547.42	5404.90	-1428.37	40.1590073	-104.5616542	0.22	
12334.00	89.640	357.500	6949.83	5640.88	5498.86	-1430.89	40.1592653	-104.5616597	2.06	
12429.00	90.440	359.550	6949.77	5735.31	5593.82	-1433.34	40.1595260	-104.5616649	2.32	
12524.00	90.540	359.620	6948.95	5829.54	5688.81	-1434.03	40.1597868	-104.5616637	0.13	
12619.00	90.410	359.660	6948.17	5923.76	5783.81	-1434.63	40.1600475	-104.5616623	0.14	
12714.00	89.700	359.240	6948.08	6018.03	5878.80	-1435.54	40.1603083	-104.5616619	0.87	
12809.00	90.260	359.960	6948.11	6112.26	5973.80	-1436.20	40.1605691	-104.5616607	0.96	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51733
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-772 AWB
Slot	SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,SEC.16)		

WELLPATH DATA (186 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12903.00	90.570	0.150	6947.43	6205.40	6067.80	-1436.11	40.1608271	-104.5616568	0.39	
12998.00	89.520	0.200	6947.35	6299.50	6162.79	-1435.82	40.1610878	-104.5616522	1.11	
13093.00	89.980	359.130	6947.77	6393.72	6257.79	-1436.38	40.1613486	-104.5616506	1.23	
13188.00	90.540	359.750	6947.34	6487.98	6352.78	-1437.30	40.1616094	-104.5616503	0.88	
13282.00	90.810	359.700	6946.23	6581.19	6446.78	-1437.75	40.1618674	-104.5616484	0.29	
13377.00	91.000	0.260	6944.73	6675.33	6541.76	-1437.79	40.1621281	-104.5616449	0.62	
13472.00	90.900	0.150	6943.15	6769.41	6636.75	-1437.45	40.1623888	-104.5616401	0.16	
13567.00	90.170	357.480	6942.27	6863.79	6731.72	-1439.41	40.1626496	-104.5616435	2.91	
13662.00	90.320	354.990	6941.86	6958.56	6826.50	-1445.65	40.1629099	-104.5616622	2.63	
13756.00	90.290	356.500	6941.36	7052.38	6920.24	-1452.62	40.1631674	-104.5616836	1.61	
13851.00	90.140	359.920	6941.00	7146.87	7015.18	-1455.59	40.1634281	-104.5616907	3.60	
13946.00	90.970	0.460	6940.08	7240.96	7110.17	-1455.28	40.1636888	-104.5616859	1.04	
14041.00	90.900	359.980	6938.53	7335.05	7205.16	-1454.91	40.1639495	-104.5616810	0.51	
14136.00	90.810	0.340	6937.12	7429.15	7300.15	-1454.65	40.1642103	-104.5616765	0.39	
14231.00	91.090	0.640	6935.54	7523.17	7395.13	-1453.83	40.1644710	-104.5616700	0.43	
14326.00	90.940	0.390	6933.86	7617.18	7490.11	-1452.98	40.1647316	-104.5616633	0.31	
14421.00	90.840	0.610	6932.38	7711.20	7585.10	-1452.15	40.1649923	-104.5616568	0.25	
14515.00	90.970	0.380	6930.90	7804.23	7679.08	-1451.34	40.1652503	-104.5616503	0.28	
14610.00	91.090	0.650	6929.19	7898.24	7774.06	-1450.49	40.1655110	-104.5616437	0.31	
14705.00	91.060	0.690	6927.41	7992.22	7869.04	-1449.37	40.1657716	-104.5616361	0.05	
14800.00	90.870	0.730	6925.81	8086.18	7964.02	-1448.20	40.1660323	-104.5616283	0.20	
14895.00	90.970	0.620	6924.28	8180.16	8059.00	-1447.08	40.1662930	-104.5616207	0.16	
14989.00	90.940	0.820	6922.72	8273.14	8152.98	-1445.90	40.1665509	-104.5616129	0.22	
15084.00	91.060	0.900	6921.06	8367.07	8247.95	-1444.47	40.1668116	-104.5616042	0.15	
15179.00	90.750	0.850	6919.56	8461.00	8342.93	-1443.02	40.1670722	-104.5615954	0.33	
15274.00	90.750	1.100	6918.31	8554.90	8437.91	-1441.41	40.1673329	-104.5615860	0.26	
15368.00	90.260	0.850	6917.48	8647.83	8531.89	-1439.81	40.1675908	-104.5615768	0.59	
15463.00	90.440	0.180	6916.90	8741.85	8626.89	-1438.95	40.1678515	-104.5615701	0.73	
15558.00	90.380	0.570	6916.22	8835.91	8721.88	-1438.33	40.1681122	-104.5615643	0.42	
15653.00	90.170	0.700	6915.77	8929.91	8816.87	-1437.28	40.1683730	-104.5615569	0.26	
15748.00	90.500	1.010	6915.21	9023.85	8911.86	-1435.86	40.1686336	-104.5615483	0.48	
15843.00	90.380	1.060	6914.48	9117.75	9006.84	-1434.14	40.1688943	-104.5615385	0.14	
15937.00	90.600	1.210	6913.68	9210.63	9100.82	-1432.28	40.1691522	-104.5615283	0.28	
16032.00	90.040	0.920	6913.15	9304.52	9195.80	-1430.52	40.1694129	-104.5615184	0.66	
16127.00	90.500	1.380	6912.70	9398.39	9290.78	-1428.61	40.1696735	-104.5615080	0.68	
16222.00	90.290	1.340	6912.05	9492.21	9385.75	-1426.35	40.1699341	-104.5614963	0.23	
16317.00	90.380	1.620	6911.49	9585.99	9480.72	-1423.90	40.1701947	-104.5614839	0.31	
16412.00	90.410	1.670	6910.84	9679.73	9575.68	-1421.17	40.1704553	-104.5614706	0.06	
16506.00	90.410	359.420	6910.16	9772.75	9669.67	-1420.28	40.1707133	-104.5614638	2.39	
16601.00	90.260	358.820	6909.61	9867.08	9764.65	-1421.74	40.1709740	-104.5614654	0.65	
16696.00	89.950	359.540	6909.43	9961.40	9859.64	-1423.10	40.1712348	-104.5614667	0.83	
16791.00	90.040	359.190	6909.44	10055.68	9954.64	-1424.15	40.1714956	-104.5614669	0.38	
16886.00	90.350	359.610	6909.12	10149.95	10049.63	-1425.15	40.1717563	-104.5614668	0.55	
16981.00	90.970	359.480	6908.02	10244.19	10144.62	-1425.90	40.1720171	-104.5614659	0.67	
17076.00	90.780	359.710	6906.57	10338.41	10239.61	-1426.57	40.1722778	-104.5614647	0.31	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51733
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-772 AWB
Slot	SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,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
17170.00	90.690	359.820	6905.37	10431.61	10333.60	-1426.96	40.1725358	-104.5614626	0.15	
17265.00	90.570	359.930	6904.32	10525.78	10428.59	-1427.16	40.1727966	-104.5614597	0.17	
17360.00	90.600	359.580	6903.35	10619.97	10523.59	-1427.57	40.1730574	-104.5614576	0.37	
17455.00	90.290	359.730	6902.62	10714.19	10618.58	-1428.14	40.1733181	-104.5614560	0.36	Last BH MWD Survey (460'FNL&1215'FWL,SEC.04)
17455.56†	90.290	359.730	6902.61	10714.74	10619.14	-1428.15	40.1733197	-104.5614560	0.00	Cross 460'FNL (460'FNL&1215'FWL,SEC.04)
17504.00‡	90.290	359.730	6902.37	10762.78	10667.58	-1428.37	40.1734526	-104.5614550	0.00	Projectio to Bit (411'FNL&1215'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	-36.00	9.80	1777.68	3265469.02	1296762.33	40.1441048	-104.5503914	polygon
2D Polygon: dimensions not calculated								
Rubicon State Y16-718 SECTION 9	-36.00	9.80	1777.68	3265469.02	1296762.33	40.1441048	-104.5503914	polygon
2D Polygon: dimensions not calculated								
HULLABALOO Y21-787 SECTION 16	27.00	141.76	-1748.93	3261942.56	1296894.28	40.1445700	-104.5630000	polygon
2D Polygon: dimensions not calculated								
GIG-EM STATE Y9-772 BHL (300'FNL & 1202'FWL,SEC.04)	6906.00	10779.45	-1439.34	3262252.13	1307531.50	<b>40.1737600</b>	<b>-104.5614900</b>	point
GIG-EM STATE Y9-772 BPZ (460'FNL & 1202'FWL,SEC.04)	6907.31	10619.14	-1440.44	3262251.04	1307371.20	<b>40.1733200</b>	<b>-104.5615000</b>	point
GIG-EM STATE Y9-772 LP /TPZ (133'FSL & 1195'FWL,SEC.09)	6988.00	721.01	-1405.58	3262285.90	1297473.50	<b>40.1461500</b>	<b>-104.5617500</b>	point
406N Hardline 460'FNL&FWL	7199.00	-0.24	-22.36	3263669.05	1296752.29	40.1441300	-104.5568300	polygon
2D Polygon: dimensions not calculated								

WELLPATH COMPOSITION - Ref Wellbore: GIG-EM STATE Y9-772 AWB Ref Wellpath: GIG-EM STATE Y9-772 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 Y9-772 AWB	2/17/2023
2044.00	17504.00	OWSG MWD rev2 (MS+IFR1)	8.5" Hole ATC OWSG MWD rev2 (MS+IFR1) <2192'-17455'>	GIG-EM STATE Y9-772 AWB	2/21/2023



# Actual Wellpath Report

GIG-EM STATE Y9-772 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	GIG-EM STATE Y9-772
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API	05-123-51733
Facility	SEC.16-T02N-R64W	Wellbore	GIG-EM STATE Y9-772 AWB
Slot	SLOT#15 GIG-EM STATE Y9-772 (595'FNL&2588'FWL,SEC.16)		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
162.00	0.330	251.110	162.00	First BH MWD Survey	
7555.11	88.386	353.668	6981.11	Planned Landing at 133'FSL (133'FSL&1183'FWL,SEC.09)	
7622.41	90.200	355.283	6981.66	200' FSL & 1177'FWL,SEC.09)	
17455.00	90.290	359.730	6902.62	Last BH MWD Survey (460'FNL&1215'FWL,SEC.04)	
17455.56	90.290	359.730	6902.61	Cross 460'FNL (460'FNL&1215'FWL,SEC.04)	
17504.00	90.290	359.730	6902.37	Projectio to Bit (411'FNL&1215'FWL,SEC.04)	