

NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#07 GUTTERSEN C28-765 (317FSL & 1515FWL,SEC.33)

Field: WELD COUNTY (NOBLE NAD 83 GRD) Well: Gutsersen C28-765 ST01

Facility: SEC.33-T04N-R64W Wellbore: Gutsersen C28-765 ST01 PWB

Plot reference wellpath is Gutsersen C28-765 REV-F.0 ST01 PWP

Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

True vertical depths are referenced to PD 460 (4723GL+21KB@4744RKB) (RKB)

North Reference: Grid north

Reference wellpath measured depths are referenced to PD 460 (4723GL+21KB@4744RKB) (RKB)

Scale: True distance

PD 460 (4723GL+21KB@4744RKB) (RKB) to Mean Sea Level: 4744 feet

Coordinates are in feet referenced to Slot

Mean Sea Level to Mud line (At Slot: SLOT#07 GUTTERSEN C28-765 (317FSL & 1515FWL,SEC.33)): 0 feet

Depths are in feet

Offset wellpath MDs are referenced to each path's default MD datum

Created by: guesalar on 2022-09-11; Database: WellArchitectDB

Location Information

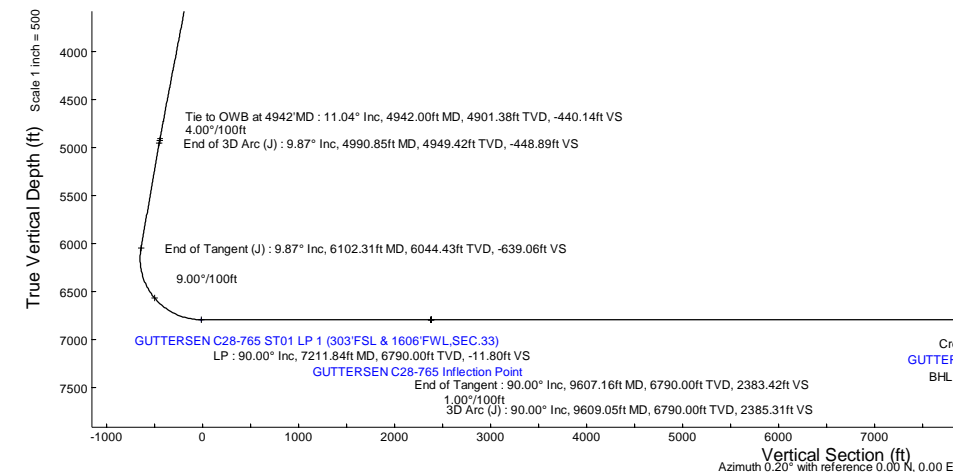
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.33-T04N-R64W				3264404.630	1339924.700	40°15'45.4140"N	104°33'5.1764"W
Slot	Local N (ft)	Local E (ft)		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#07 GUTTERSEN C28-765 (317FSL & 1515FWL,SEC.33)	-23.77	-2062.60		3262342.122	1339900.930	40°15'45.3960"N	104°33'35.7840"W
PD 460 (4723GL+21KB@4744RKB) (RKB) to Mud line (At Slot: SLOT#07 GUTTERSEN C28-765 (317FSL & 1515FWL,SEC.33))						4744ft	
Mean Sea Level to Mud line (At Slot: SLOT#07 GUTTERSEN C28-765 (317FSL & 1515FWL,SEC.33))						0ft	
PD 460 (4723GL+21KB@4744RKB) (RKB) to Mean Sea Level						4744ft	

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Gutsersen C28-765 Section 28	N/A	-4.00	25.59	2062.30	3264404.33	1339926.52	40°15'45.4300"N	104°33'5.1800"W
Gutsersen C28-765 Section 33	N/A	-4.00	25.59	2062.30	3264404.33	1339926.52	40°15'45.4300"N	104°33'5.1800"W
GUTTERSEN C28-765 Cross 460° FNL ST01 (460° FNL & 1618° FWL, SEC.28)	N/A	6792.00	9769.85	34.46	3262376.58	1349670.34	40°17'21.9312"N	104°33'34.0028"W
GUTTERSEN C28-765 Cross 460° FNL REV-2 ST01 (460° FNL & 1618° FWL, SEC.28)	16993.98	6790.00	9769.85	34.46	3262376.58	1349670.34	40°17'21.9312"N	104°33'34.0028"W
GUTTERSEN C28-765 Inflection Point	9607.16	6790.00	2383.16	78.07	3262420.19	1342283.98	40°16'8.9366"N	104°33'34.4510"W
GUTTERSEN C28-765 ST01 LP 1 (303° FSL & 1606° FWL, SEC.33)	7211.84	6790.00	-12.12	93.00	3262435.12	1339888.81	40°15'45.2665"N	104°33'34.5881"W
GUTTERSEN C28 460° Setback	N/A	6999.00	-0.47	-44.65	3262297.47	1339900.46	40°15'45.3960"N	104°33'36.3600"W

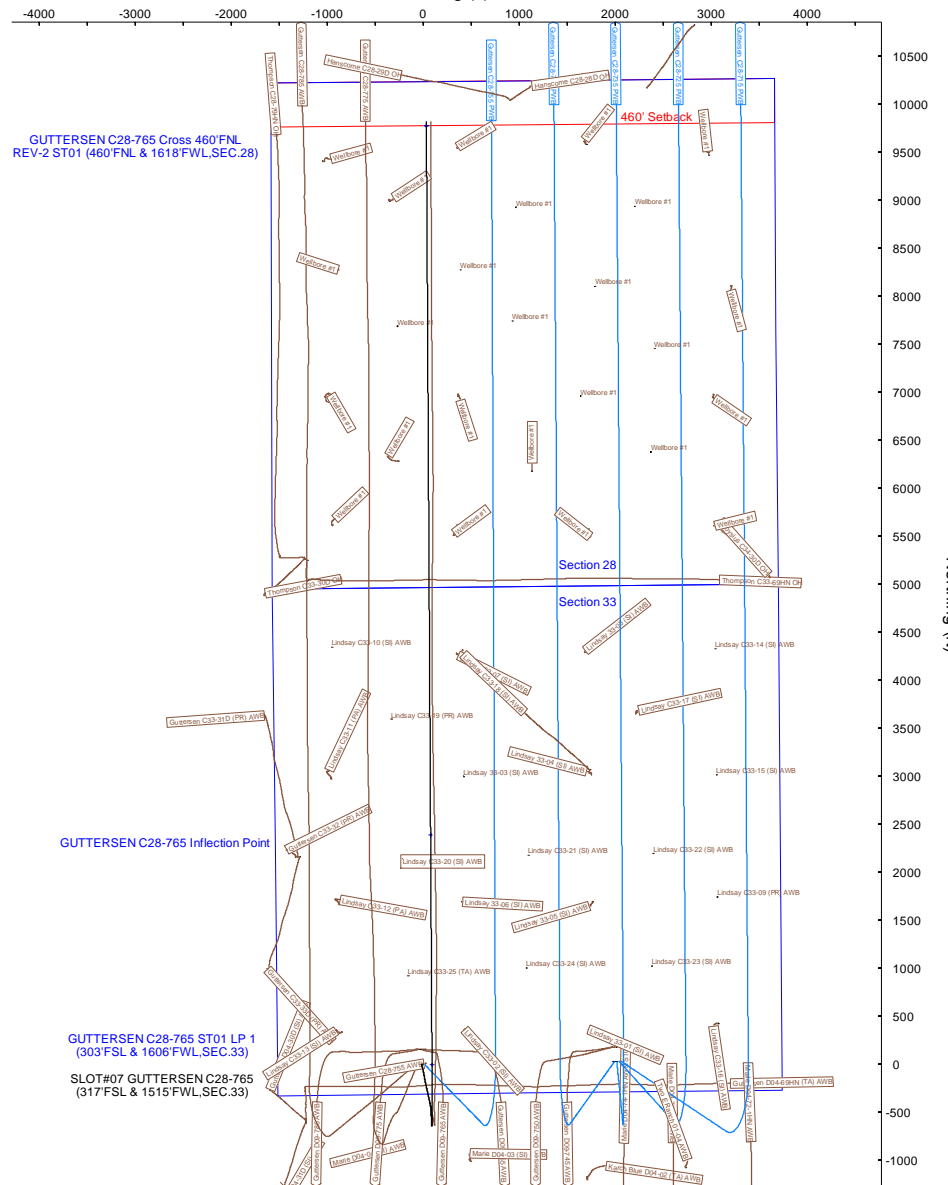
Well Profile Data

Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie to OWB at 4942 MD	4942.00	11.04	167.910	4901.38	-440.41	77.27	0.65	-440.14
End of 3D Arc (J)	4990.85	9.872	176.561	4949.42	-449.16	78.50	4.00	-448.89
End of Tangent (J)	6102.31	9.872	176.561	6044.43	-639.37	89.93	0.00	-639.06
LP	7211.84	90.000	359.643	6790.00	-12.12	93.00	9.00	-11.80
End of Tangent	9607.16	90.000	359.643	6790.00	2383.16	78.07	0.00	2383.42
3D Arc (J)	9609.05	90.000	359.662	6790.00	2385.05	78.06	1.00	2385.31
Cross 460° Line, SEC.28	16993.98	90.000	359.662	6790.00	9769.85	34.46	0.00	9769.91
BHL: 410° FNL & 1618° FWL, SEC.28	17043.98	90.000	359.662	6790.00	9819.85	34.17	0.00	9819.91



Scale 1 inch = 500

Easting (ft)





Planned Wellpath Report
Guttersen C28-765 REV-F.0 ST01 PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen C28-765 ST01
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.33-T04N-R64W	Wellbore	Guttersen C28-765 ST01 PWB
Slot	SLOT#07 GUTTERSEN C28-765 (317'FSL & 1515'FWL,SEC.33)	Sidetrack from	Guttersen C28-765 AWP at 4942.00 MD

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	0.999957	Report Generated	9/11/2022 at 5:51:16 PM
Convergence at slot	0.61° East	Database	WellArchitectDB

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-23.77	-2062.60	3262342.12	1339900.93	40.2626100°	-104.5599400°
Facility Reference Pt			3264404.63	1339924.70	40.2626150°	-104.5525490°
Field Reference Pt			3000000.00	4454105.15	48.7761986°	-105.5000000°

WELLPATH DATUM			
Calculation method	Minimum curvature	PD 460 (4723'GL+21'KB@4744'RKB) (RKB) to Facility Vertical Datum	4744.00ft
Horizontal Reference Pt	Slot	PD 460 (4723'GL+21'KB@4744'RKB) (RKB) to Mean Sea Level	4744.00ft
Vertical Reference Pt	PD 460 (4723'GL+21'KB@4744'RKB) (RKB)	PD 460 (4723'GL+21'KB@4744'RKB) (RKB) to Mud Line at Slot (SLOT#07 GUTTERSEN C28-765 (317'FSL & 1515'FWL,SEC.33))	4744.00ft
MD Reference Pt	PD 460 (4723'GL+21'KB@4744'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.20°



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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen C28-765 ST01
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.33-T04N-R64W	Wellbore	Guttersen C28-765 ST01 PWB
Slot	SLOT#07 GUTTERSEN C28-765 (317'FSL & 1515'FWL,SEC.33)	Sidetrack from	Guttersen C28-765 AWP at 4942.00 MD

WELLPATH DATA (184 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	215.590	0.00	0.00	0.00	0.00	40.2626100	-104.5599400	0.00	
155.00	0.240	215.590	155.00	-0.26	-0.26	-0.19	40.2626093	-104.5599407	0.15	
248.00	0.200	223.660	248.00	-0.54	-0.54	-0.41	40.2626085	-104.5599415	0.05	
338.00	0.250	187.020	338.00	-0.85	-0.85	-0.55	40.2626077	-104.5599420	0.17	
428.00	0.250	192.280	428.00	-1.24	-1.24	-0.61	40.2626066	-104.5599422	0.03	
517.00	0.220	205.860	517.00	-1.58	-1.58	-0.73	40.2626057	-104.5599427	0.07	
607.00	0.260	213.910	607.00	-1.91	-1.90	-0.92	40.2626048	-104.5599434	0.06	
696.00	0.190	234.610	696.00	-2.16	-2.16	-1.15	40.2626041	-104.5599442	0.12	
786.00	0.370	223.690	785.99	-2.46	-2.45	-1.47	40.2626033	-104.5599454	0.21	
876.00	0.520	216.360	875.99	-3.00	-2.99	-1.92	40.2626018	-104.5599470	0.18	
965.00	0.610	226.000	964.99	-3.66	-3.65	-2.50	40.2626001	-104.5599491	0.15	
1055.00	0.660	225.710	1054.98	-4.35	-4.34	-3.21	40.2625982	-104.5599517	0.06	
1144.00	0.720	236.580	1143.98	-5.02	-5.01	-4.05	40.2625964	-104.5599547	0.16	
1234.00	0.690	241.710	1233.97	-5.59	-5.58	-4.99	40.2625948	-104.5599581	0.08	
1323.00	0.780	248.960	1322.96	-6.07	-6.05	-6.03	40.2625936	-104.5599618	0.15	
1413.00	0.730	250.960	1412.95	-6.48	-6.45	-7.15	40.2625925	-104.5599658	0.06	
1503.00	0.830	264.600	1502.94	-6.73	-6.70	-8.34	40.2625918	-104.5599701	0.23	
1592.00	0.750	260.130	1591.94	-6.90	-6.86	-9.55	40.2625914	-104.5599745	0.11	
1681.00	0.730	263.920	1680.93	-7.06	-7.02	-10.69	40.2625910	-104.5599786	0.06	
1771.00	0.980	263.910	1770.92	-7.21	-7.17	-12.03	40.2625907	-104.5599834	0.28	
1860.00	1.270	264.820	1859.90	-7.38	-7.33	-13.76	40.2625903	-104.5599896	0.33	
1920.00	1.420	264.100	1919.89	-7.52	-7.47	-15.17	40.2625899	-104.5599946	0.25	
1986.00	0.500	243.490	1985.88	-7.74	-7.68	-16.24	40.2625894	-104.5599985	1.47	
2165.00	0.140	132.410	2164.87	-8.24	-8.18	-16.77	40.2625880	-104.5600004	0.32	
2255.00	0.000	7.190	2254.87	-8.31	-8.25	-16.69	40.2625878	-104.5600001	0.16	
2344.00	0.960	167.180	2343.87	-9.04	-8.98	-16.53	40.2625858	-104.5599996	1.08	
2434.00	2.320	164.060	2433.83	-11.52	-11.47	-15.86	40.2625790	-104.5599973	1.51	
2523.00	3.570	164.920	2522.71	-15.93	-15.88	-14.64	40.2625669	-104.5599931	1.41	
2613.00	5.060	165.270	2612.45	-22.46	-22.42	-12.91	40.2625488	-104.5599871	1.66	
2702.00	7.080	165.010	2700.95	-31.55	-31.52	-10.49	40.2625238	-104.5599788	2.27	
2792.00	8.800	165.080	2790.08	-43.55	-43.53	-7.28	40.2624907	-104.5599677	1.91	
2881.00	11.160	164.960	2877.73	-58.44	-58.42	-3.29	40.2624497	-104.5599540	2.65	
2971.00	10.690	167.180	2966.10	-74.97	-74.98	0.82	40.2624042	-104.5599399	0.70	
3061.00	11.400	168.620	3054.43	-91.82	-91.83	4.43	40.2623578	-104.5599276	0.85	
3150.00	11.250	168.960	3141.70	-108.95	-108.98	7.82	40.2623106	-104.5599161	0.18	
3240.00	10.880	170.420	3230.03	-125.93	-125.97	10.92	40.2622639	-104.5599057	0.52	
3330.00	9.710	170.560	3318.58	-141.79	-141.83	13.58	40.2622203	-104.5598967	1.30	
3419.00	10.750	168.940	3406.16	-157.33	-157.38	16.40	40.2621775	-104.5598872	1.21	
3509.00	10.740	169.080	3494.58	-173.79	-173.86	19.60	40.2621322	-104.5598764	0.03	
3598.00	10.580	168.840	3582.05	-189.93	-190.01	22.75	40.2620878	-104.5598657	0.19	
3688.00	11.050	167.360	3670.45	-206.44	-206.54	26.24	40.2620423	-104.5598538	0.61	
3777.00	11.120	167.310	3757.79	-223.13	-223.23	29.99	40.2619964	-104.5598410	0.08	
3867.00	11.150	166.880	3846.09	-240.05	-240.17	33.87	40.2619498	-104.5598278	0.10	
3957.00	11.150	167.260	3934.39	-257.00	-257.14	37.77	40.2619031	-104.5598145	0.08	
4046.00	10.950	168.090	4021.74	-273.65	-273.80	41.41	40.2618573	-104.5598020	0.29	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen C28-765 ST01
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.33-T04N-R64W	Wellbore	Guttersen C28-765 ST01 PWB
Slot	SLOT#07 GUTTERSEN C28-765 (317'FSL & 1515'FWL,SEC.33)	Sidetrack from	Guttersen C28-765 AWP at 4942.00 MD

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4136.00	11.220	167.370	4110.06	-290.55	-290.71	45.09	40.2618107	-104.5597895	0.34	
4226.00	10.950	167.850	4198.38	-307.44	-307.61	48.80	40.2617643	-104.5597768	0.32	
4315.00	11.150	167.140	4285.73	-324.08	-324.26	52.49	40.2617184	-104.5597642	0.27	
4405.00	11.060	168.150	4374.05	-341.00	-341.19	56.20	40.2616719	-104.5597516	0.24	
4495.00	11.160	167.300	4462.36	-357.93	-358.14	59.89	40.2616252	-104.5597390	0.21	
4584.00	10.770	169.010	4549.74	-374.48	-374.70	63.37	40.2615797	-104.5597272	0.57	
4674.00	10.920	166.840	4638.13	-391.03	-391.26	66.91	40.2615341	-104.5597151	0.48	
4763.00	10.970	168.710	4725.51	-407.53	-407.77	70.49	40.2614887	-104.5597029	0.40	
4853.00	10.460	168.220	4813.94	-423.91	-424.17	73.84	40.2614436	-104.5596916	0.58	
4942.00	11.040	167.910	4901.38	-440.14	-440.41	77.27	40.2613989	-104.5596799	0.65	Tie to OWB at 4942'MD
4990.85	9.872	176.561	4949.42	-448.89	-449.16	78.50	40.2613748	-104.5596758	4.00	End of 3D Arc (J)
5042.00†	9.872	176.561	4999.81	-457.64	-457.92	79.03	40.2613508	-104.5596743	0.00	
5142.00†	9.872	176.561	5098.33	-474.75	-475.03	80.06	40.2613038	-104.5596712	0.00	
5242.00†	9.872	176.561	5196.85	-491.86	-492.14	81.08	40.2612568	-104.5596682	0.00	
5342.00†	9.872	176.561	5295.37	-508.97	-509.26	82.11	40.2612098	-104.5596651	0.00	
5442.00†	9.872	176.561	5393.89	-526.08	-526.37	83.14	40.2611628	-104.5596621	0.00	
5542.00†	9.872	176.561	5492.41	-543.19	-543.48	84.17	40.2611158	-104.5596591	0.00	
5642.00†	9.872	176.561	5590.93	-560.30	-560.60	85.20	40.2610688	-104.5596560	0.00	
5742.00†	9.872	176.561	5689.45	-577.41	-577.71	86.23	40.2610218	-104.5596530	0.00	
5842.00†	9.872	176.561	5787.97	-594.52	-594.82	87.26	40.2609748	-104.5596500	0.00	
5942.00†	9.872	176.561	5886.49	-611.63	-611.94	88.28	40.2609278	-104.5596469	0.00	
6042.00†	9.872	176.561	5985.01	-628.74	-629.05	89.31	40.2608808	-104.5596439	0.00	
6102.31	9.872	176.561	6044.43	-639.06	-639.37	89.93	40.2608524	-104.5596421	0.00	End of Tangent (J)
6142.00†	6.308	174.787	6083.71	-644.62	-644.94	90.34	40.2608371	-104.5596408	9.00	
6242.00†	2.767	10.806	6183.56	-647.73	-648.05	91.29	40.2608286	-104.5596375	9.00	
6342.00†	11.727	2.227	6282.66	-635.17	-635.50	92.14	40.2608630	-104.5596340	9.00	
6442.00†	20.721	1.060	6378.58	-607.27	-607.60	92.86	40.2609396	-104.5596304	9.00	
6542.00†	29.719	0.582	6468.95	-564.71	-565.03	93.44	40.2610564	-104.5596267	9.00	
6642.00†	38.718	0.312	6551.56	-508.53	-508.86	93.87	40.2612105	-104.5596230	9.00	
6742.00†	47.717	0.130	6624.36	-440.12	-440.45	94.12	40.2613983	-104.5596195	9.00	
6842.00†	56.716	359.995	6685.57	-361.17	-361.50	94.20	40.2616150	-104.5596162	9.00	
6942.00†	65.716	359.885	6733.67	-273.62	-273.95	94.10	40.2618553	-104.5596132	9.00	
7042.00†	74.715	359.789	6767.48	-179.62	-179.95	93.84	40.2621133	-104.5596106	9.00	
7108.00†	80.655	359.731	6781.55	-115.17	-115.50	93.57	40.2622903	-104.5596092	9.00	TPZ (200'FSL & 1605'FWL,SEC.33)
7142.00†	83.715	359.702	6786.17	-81.49	-81.82	93.40	40.2623827	-104.5596085	9.00	
7211.84	90.000	359.643	6790.00†	-11.80	-12.12	93.00	40.2625740	-104.5596073	9.00	LP
7242.00†	90.000	359.643	6790.00	18.37	18.04	92.81	40.2626568	-104.5596068	0.00	
7342.00†	90.000	359.643	6790.00	118.36	118.04	92.19	40.2629313	-104.5596052	0.00	
7442.00†	90.000	359.643	6790.00	218.36	218.04	91.57	40.2632058	-104.5596036	0.00	
7542.00†	90.000	359.643	6790.00	318.35	318.04	90.94	40.2634803	-104.5596021	0.00	
7642.00†	90.000	359.643	6790.00	418.35	418.04	90.32	40.2637548	-104.5596005	0.00	
7742.00†	90.000	359.643	6790.00	518.34	518.03	89.70	40.2640293	-104.5595989	0.00	
7842.00†	90.000	359.643	6790.00	618.34	618.03	89.07	40.2643038	-104.5595974	0.00	
7942.00†	90.000	359.643	6790.00	718.33	718.03	88.45	40.2645783	-104.5595958	0.00	
8042.00†	90.000	359.643	6790.00	818.33	818.03	87.83	40.2648528	-104.5595942	0.00	



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.33-T04N-R64W	Wellbore	Guttersen C28-765 ST01 PWB
Slot	SLOT#07 GUTTERSEN C28-765 (317'FSL & 1515'FWL,SEC.33)	Sidetrack from	Guttersen C28-765 AWP at 4942.00 MD

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8142.00†	90.000	359.643	6790.00	918.32	918.03	87.20	40.2651273	-104.5595927	0.00	
8242.00†	90.000	359.643	6790.00	1018.32	1018.02	86.58	40.2654018	-104.5595911	0.00	
8342.00†	90.000	359.643	6790.00	1118.31	1118.02	85.96	40.2656763	-104.5595895	0.00	
8442.00†	90.000	359.643	6790.00	1218.31	1218.02	85.33	40.2659507	-104.5595880	0.00	
8542.00†	90.000	359.643	6790.00	1318.30	1318.02	84.71	40.2662252	-104.5595864	0.00	
8642.00†	90.000	359.643	6790.00	1418.30	1418.02	84.09	40.2664997	-104.5595848	0.00	
8742.00†	90.000	359.643	6790.00	1518.29	1518.01	83.46	40.2667742	-104.5595833	0.00	
8842.00†	90.000	359.643	6790.00	1618.29	1618.01	82.84	40.2670487	-104.5595817	0.00	
8942.00†	90.000	359.643	6790.00	1718.29	1718.01	82.22	40.2673232	-104.5595801	0.00	
9042.00†	90.000	359.643	6790.00	1818.28	1818.01	81.59	40.2675977	-104.5595786	0.00	
9142.00†	90.000	359.643	6790.00	1918.28	1918.01	80.97	40.2678722	-104.5595770	0.00	
9242.00†	90.000	359.643	6790.00	2018.27	2018.00	80.35	40.2681467	-104.5595754	0.00	
9342.00†	90.000	359.643	6790.00	2118.27	2118.00	79.72	40.2684212	-104.5595739	0.00	
9442.00†	90.000	359.643	6790.00	2218.26	2218.00	79.10	40.2686957	-104.5595723	0.00	
9542.00†	90.000	359.643	6790.00	2318.26	2318.00	78.48	40.2689702	-104.5595707	0.00	
9607.16	90.000	359.643	6790.00‡	2383.42	2383.16	78.07	40.2691490	-104.5595697	0.00	End of Tangent
9609.05	90.000	359.662	6790.00	2385.31	2385.05	78.06	40.2691542	-104.5595697	1.00	3D Arc (J)
9642.00†	90.000	359.662	6790.00	2418.25	2418.00	77.86	40.2692447	-104.5595691	0.00	
9742.00†	90.000	359.662	6790.00	2518.25	2517.99	77.27	40.2695192	-104.5595675	0.00	
9842.00†	90.000	359.662	6790.00	2618.24	2617.99	76.68	40.2697937	-104.5595658	0.00	
9942.00†	90.000	359.662	6790.00	2718.24	2717.99	76.09	40.2700682	-104.5595641	0.00	
10042.00†	90.000	359.662	6790.00	2818.23	2817.99	75.50	40.2703426	-104.5595624	0.00	
10142.00†	90.000	359.662	6790.00	2918.23	2917.99	74.91	40.2706171	-104.5595607	0.00	
10242.00†	90.000	359.662	6790.00	3018.23	3017.99	74.32	40.2708916	-104.5595590	0.00	
10342.00†	90.000	359.662	6790.00	3118.22	3117.98	73.73	40.2711661	-104.5595573	0.00	
10442.00†	90.000	359.662	6790.00	3218.22	3217.98	73.14	40.2714406	-104.5595557	0.00	
10542.00†	90.000	359.662	6790.00	3318.21	3317.98	72.55	40.2717151	-104.5595540	0.00	
10642.00†	90.000	359.662	6790.00	3418.21	3417.98	71.96	40.2719896	-104.5595523	0.00	
10742.00†	90.000	359.662	6790.00	3518.20	3517.98	71.37	40.2722641	-104.5595506	0.00	
10842.00†	90.000	359.662	6790.00	3618.20	3617.98	70.78	40.2725386	-104.5595489	0.00	
10942.00†	90.000	359.662	6790.00	3718.20	3717.97	70.19	40.2728131	-104.5595472	0.00	
11042.00†	90.000	359.662	6790.00	3818.19	3817.97	69.60	40.2730876	-104.5595455	0.00	
11142.00†	90.000	359.662	6790.00	3918.19	3917.97	69.01	40.2733621	-104.5595439	0.00	
11242.00†	90.000	359.662	6790.00	4018.18	4017.97	68.42	40.2736366	-104.5595422	0.00	
11342.00†	90.000	359.662	6790.00	4118.18	4117.97	67.83	40.2739111	-104.5595405	0.00	
11442.00†	90.000	359.662	6790.00	4218.17	4217.96	67.24	40.2741855	-104.5595388	0.00	
11542.00†	90.000	359.662	6790.00	4318.17	4317.96	66.65	40.2744600	-104.5595371	0.00	
11642.00†	90.000	359.662	6790.00	4418.16	4417.96	66.06	40.2747345	-104.5595354	0.00	
11742.00†	90.000	359.662	6790.00	4518.16	4517.96	65.47	40.2750090	-104.5595338	0.00	
11842.00†	90.000	359.662	6790.00	4618.16	4617.96	64.88	40.2752835	-104.5595321	0.00	
11942.00†	90.000	359.662	6790.00	4718.15	4717.96	64.29	40.2755580	-104.5595304	0.00	
12042.00†	90.000	359.662	6790.00	4818.15	4817.95	63.70	40.2758325	-104.5595287	0.00	
12142.00†	90.000	359.662	6790.00	4918.14	4917.95	63.11	40.2761070	-104.5595270	0.00	
12242.00†	90.000	359.662	6790.00	5018.14	5017.95	62.52	40.2763815	-104.5595253	0.00	
12342.00†	90.000	359.662	6790.00	5118.13	5117.95	61.93	40.2766560	-104.5595236	0.00	



Planned Wellpath Report
Guttersen C28-765 REV-F.0 ST01 PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen C28-765 ST01
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.33-T04N-R64W	Wellbore	Guttersen C28-765 ST01 PWB
Slot	SLOT#07 GUTTERSEN C28-765 (317'FSL & 1515'FWL,SEC.33)	Sidetrack from	Guttersen C28-765 AWP at 4942.00 MD

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12442.00†	90.000	359.662	6790.00	5218.13	5217.95	61.33	40.2769305	-104.5595220	0.00	
12542.00†	90.000	359.662	6790.00	5318.12	5317.95	60.74	40.2772050	-104.5595203	0.00	
12642.00†	90.000	359.662	6790.00	5418.12	5417.94	60.15	40.2774795	-104.5595186	0.00	
12742.00†	90.000	359.662	6790.00	5518.12	5517.94	59.56	40.2777540	-104.5595169	0.00	
12842.00†	90.000	359.662	6790.00	5618.11	5617.94	58.97	40.2780284	-104.5595152	0.00	
12942.00†	90.000	359.662	6790.00	5718.11	5717.94	58.38	40.2783029	-104.5595135	0.00	
13042.00†	90.000	359.662	6790.00	5818.10	5817.94	57.79	40.2785774	-104.5595118	0.00	
13142.00†	90.000	359.662	6790.00	5918.10	5917.94	57.20	40.2788519	-104.5595102	0.00	
13242.00†	90.000	359.662	6790.00	6018.09	6017.93	56.61	40.2791264	-104.5595085	0.00	
13342.00†	90.000	359.662	6790.00	6118.09	6117.93	56.02	40.2794009	-104.5595068	0.00	
13442.00†	90.000	359.662	6790.00	6218.09	6217.93	55.43	40.2796754	-104.5595051	0.00	
13542.00†	90.000	359.662	6790.00	6318.08	6317.93	54.84	40.2799499	-104.5595034	0.00	
13642.00†	90.000	359.662	6790.00	6418.08	6417.93	54.25	40.2802244	-104.5595017	0.00	
13742.00†	90.000	359.662	6790.00	6518.07	6517.92	53.66	40.2804989	-104.5595000	0.00	
13842.00†	90.000	359.662	6790.00	6618.07	6617.92	53.07	40.2807734	-104.5594984	0.00	
13942.00†	90.000	359.662	6790.00	6718.06	6717.92	52.48	40.2810479	-104.5594967	0.00	
14042.00†	90.000	359.662	6790.00	6818.06	6817.92	51.89	40.2813224	-104.5594950	0.00	
14142.00†	90.000	359.662	6790.00	6918.05	6917.92	51.30	40.2815968	-104.5594933	0.00	
14242.00†	90.000	359.662	6790.00	7018.05	7017.92	50.71	40.2818713	-104.5594916	0.00	
14342.00†	90.000	359.662	6790.00	7118.05	7117.91	50.12	40.2821458	-104.5594899	0.00	
14442.00†	90.000	359.662	6790.00	7218.04	7217.91	49.53	40.2824203	-104.5594882	0.00	
14542.00†	90.000	359.662	6790.00	7318.04	7317.91	48.94	40.2826948	-104.5594866	0.00	
14642.00†	90.000	359.662	6790.00	7418.03	7417.91	48.35	40.2829693	-104.5594849	0.00	
14742.00†	90.000	359.662	6790.00	7518.03	7517.91	47.76	40.2832438	-104.5594832	0.00	
14842.00†	90.000	359.662	6790.00	7618.02	7617.91	47.17	40.2835183	-104.5594815	0.00	
14942.00†	90.000	359.662	6790.00	7718.02	7717.90	46.58	40.2837928	-104.5594798	0.00	
15042.00†	90.000	359.662	6790.00	7818.01	7817.90	45.99	40.2840673	-104.5594781	0.00	
15142.00†	90.000	359.662	6790.00	7918.01	7917.90	45.40	40.2843418	-104.5594764	0.00	
15242.00†	90.000	359.662	6790.00	8018.01	8017.90	44.81	40.2846163	-104.5594748	0.00	
15342.00†	90.000	359.662	6790.00	8118.00	8117.90	44.22	40.2848908	-104.5594731	0.00	
15442.00†	90.000	359.662	6790.00	8218.00	8217.90	43.62	40.2851652	-104.5594714	0.00	
15542.00†	90.000	359.662	6790.00	8317.99	8317.89	43.03	40.2854397	-104.5594697	0.00	
15642.00†	90.000	359.662	6790.00	8417.99	8417.89	42.44	40.2857142	-104.5594680	0.00	
15742.00†	90.000	359.662	6790.00	8517.98	8517.89	41.85	40.2859887	-104.5594663	0.00	
15842.00†	90.000	359.662	6790.00	8617.98	8617.89	41.26	40.2862632	-104.5594646	0.00	
15942.00†	90.000	359.662	6790.00	8717.98	8717.89	40.67	40.2865377	-104.5594630	0.00	
16042.00†	90.000	359.662	6790.00	8817.97	8817.88	40.08	40.2868122	-104.5594613	0.00	
16142.00†	90.000	359.662	6790.00	8917.97	8917.88	39.49	40.2870867	-104.5594596	0.00	
16242.00†	90.000	359.662	6790.00	9017.96	9017.88	38.90	40.2873612	-104.5594579	0.00	
16342.00†	90.000	359.662	6790.00	9117.96	9117.88	38.31	40.2876357	-104.5594562	0.00	
16442.00†	90.000	359.662	6790.00	9217.95	9217.88	37.72	40.2879102	-104.5594545	0.00	
16542.00†	90.000	359.662	6790.00	9317.95	9317.88	37.13	40.2881847	-104.5594528	0.00	
16642.00†	90.000	359.662	6790.00	9417.94	9417.87	36.54	40.2884592	-104.5594512	0.00	
16742.00†	90.000	359.662	6790.00	9517.94	9517.87	35.95	40.2887336	-104.5594495	0.00	
16842.00†	90.000	359.662	6790.00	9617.94	9617.87	35.36	40.2890081	-104.5594478	0.00	



Planned Wellpath Report

Guttersen C28-765 REV-F.0 ST01 PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen C28-765 ST01
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.33-T04N-R64W	Wellbore	Guttersen C28-765 ST01 PWB
Slot	SLOT#07 GUTTERSEN C28-765 (317'FSL & 1515'FWL,SEC.33)	Sidetrack from	Guttersen C28-765 AWP at 4942.00 MD

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16942.00†	90.000	359.662	6790.00	9717.93	9717.87	34.77	40.2892826	-104.5594461	0.00	
16993.98	90.000	359.662	6790.00‡	9769.91	9769.85	34.46	40.2894253	-104.5594452	0.00	Cross 460' Line, SEC.28
17042.00†	90.000	359.662	6790.00	9817.93	9817.87	34.18	40.2895571	-104.5594444	0.00	
17043.98	90.000	359.662	6790.00	9819.91	9819.85	34.17	40.2895626	-104.5594444	0.00	BHL: 410'FNL & 1618'FWL,SEC.28

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Guttersen C28-715 Section 28	N/A	-4.00	25.59	2062.30	3264404.33	1339926.52	40.2626200	-104.5525500	polygon
	2D Polygon: dimensions not calculated								
Guttersen C28-715 Section 33	N/A	-4.00	25.59	2062.30	3264404.33	1339926.52	40.2626200	-104.5525500	polygon
	2D Polygon: dimensions not calculated								
GUTTERSEN C28-765 Cross 460'FNL ST01 (460'FNL & 1618'FWL,SEC.28)	N/A	6782.00	9769.85	34.46	3262376.58	1349670.34	40.2894253	-104.5594452	point
3) GUTTERSEN C28-765 Cross 460'FNL REV-2 ST01 (460'FNL & 1618'FWL,SEC.28)	16993.98	6790.00	9769.85	34.46	3262376.58	1349670.34	40.2894253	-104.5594452	point
2) GUTTERSEN C28-765 Inflection Point	9607.16	6790.00	2383.16	78.07	3262420.19	1342283.98	40.2691490	-104.5595697	point
1) GUTTERSEN C28-765 ST01 LP 1 (303'FSL & 1606'FWL,SEC.33)	7211.84	6790.00	-12.12	93.00	3262435.12	1339888.81	40.2625740	-104.5596073	point
GUTTERSEN C28 460' Setback	N/A	6999.00	-0.47	-44.65	3262297.47	1339900.46	40.2626100	-104.5601000	polygon
	2D Polygon: dimensions not calculated								

SURVEY PROGRAM - Ref Wellbore: Guttersen C28-765 ST01 PWB Ref Wellpath: Guttersen C28-765 REV-F.0 ST01 PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
21.00	1920.00	OWSG MWD rev2 (MS+IFR1)	13.5in Open Hole OWSG MWD rev2 (MS+IFR1) <155'-1920'>	Guttersen C28-765 AWB
1920.00	4942.00	OWSG MWD rev2 (MS+IFR1)	8.5" ATC OWSG MWD rev2 (MS+IFR1) <1986'-17003'>	Guttersen C28-765 AWB
4942.00	17044.14	OWSG MWD rev2 (MS+IFR1)		Guttersen C28-765 ST01 PWB



Planned Wellpath Report

Guttersen C28-765 REV-F.0 ST01 PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen C28-765 ST01
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.33-T04N-R64W	Wellbore	Guttersen C28-765 ST01 PWB
Slot	SLOT#07 GUTTERSEN C28-765 (317'FSL & 1515'FWL,SEC.33)	Sidetrack from	Guttersen C28-765 AWP at 4942.00 MD

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7108.00	80.655	359.731	6781.55	TPZ (200'FSL & 1605'FWL,SEC.33)

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4942.00	11.040	167.910	4901.38	Tie to OWB at 4942'MD
4990.85	9.872	176.561	4949.42	End of 3D Arc (J)
6102.31	9.872	176.561	6044.43	End of Tangent (J)
7211.84	90.000	359.643	6790.00	LP
9607.16	90.000	359.643	6790.00	End of Tangent
9609.05	90.000	359.662	6790.00	3D Arc (J)
16993.98	90.000	359.662	6790.00	Cross 460' Line, SEC.28
17043.98	90.000	359.662	6790.00	BHL: 410'FNL & 1618'FWL,SEC.28