

NOBLE ENERGY, INC



Location: COLORADO Slot: SLOT#01 Guttersten YY18-785 (1582'FNL & 2611'FEL, SEC.18)
 Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: Guttersten YY18-785
 Facility: SEC.18-T02N-R63W Wellbore: Guttersten YY18-785 PWB

Plot reference wellpath is Guttersten YY18-785 (REV-B.1) PWP

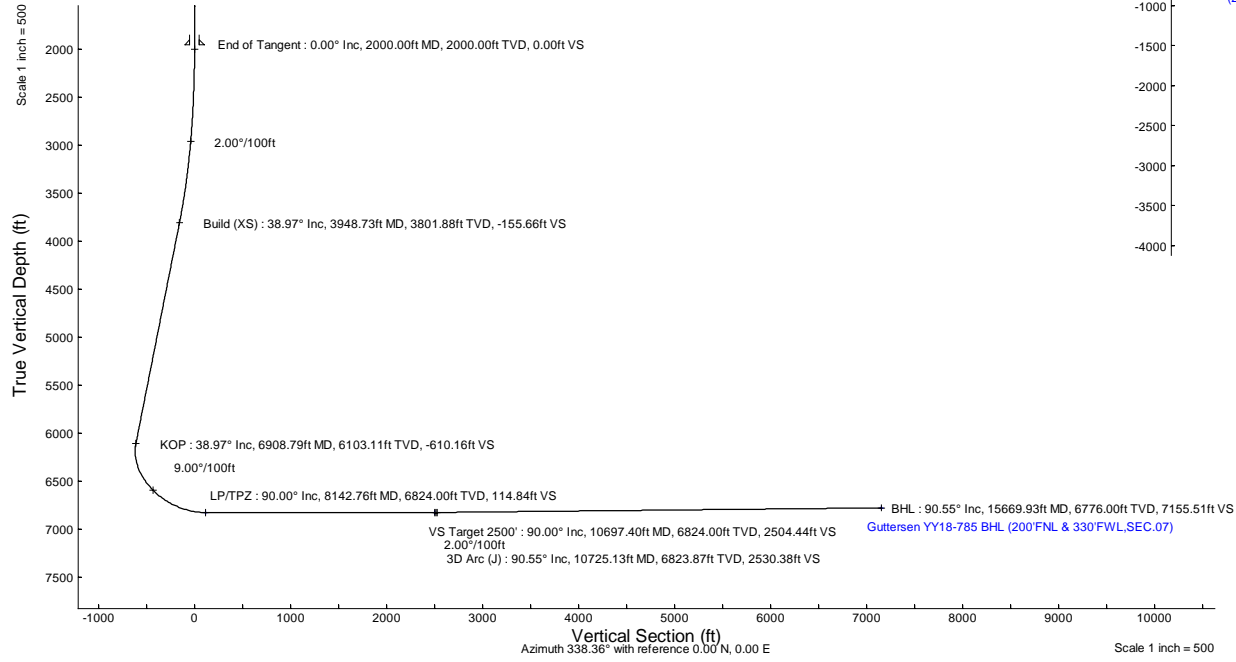
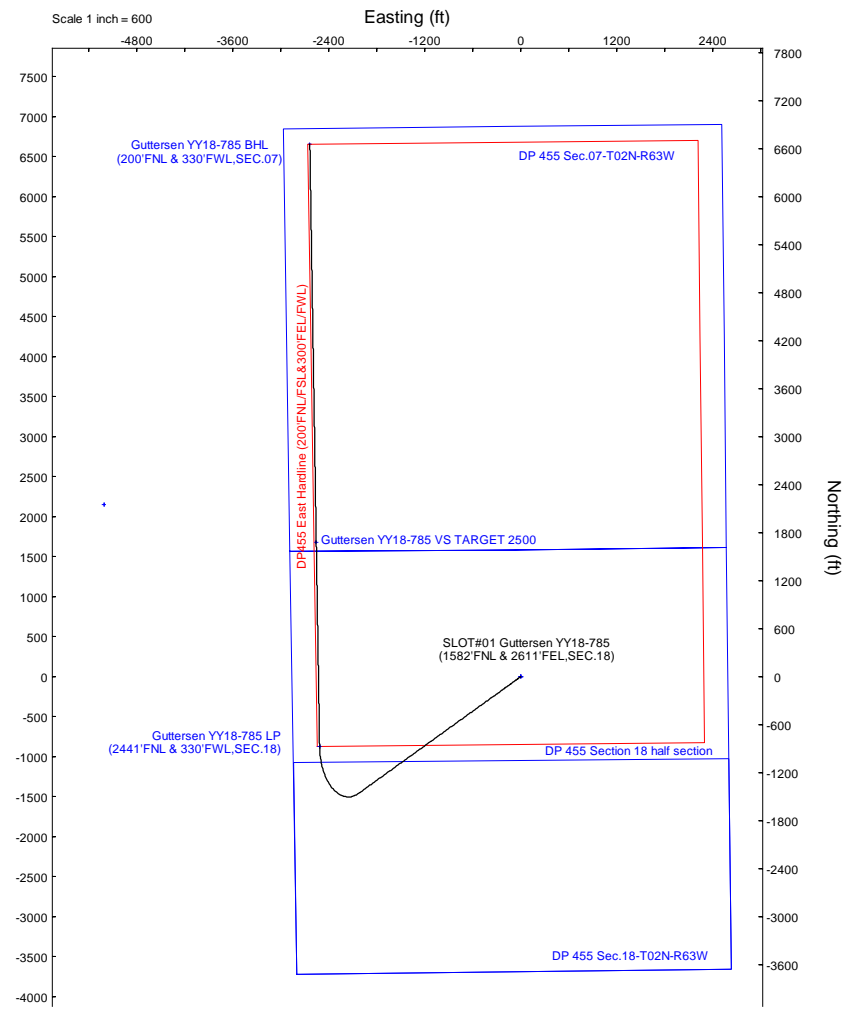
True vertical depths are referenced to Rig on SLOTR01 Guttersten YY18-08 (1582'FNL & 2611'FEL, SEC.18) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Reference wellpath measured depths are referenced to Rig on SLOTR01 Guttersten YY18-08 (1582'FNL & 2611'FEL, SEC.18) (RKB)	North Reference: Grid north
Rig on SLOTR01 Guttersten YY18-08 (1582'FNL & 2611'FEL, SEC.18) (RKB) to Mean Sea Level: 4926 feet	Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOTR01 Guttersten YY18-785 (1582'FNL & 2611'FEL, SEC.18)): 0 feet	Coordinates are in feet referenced to Slot
Offset wellpath MDs are referenced to each path's default MD datum	Depths are in feet
	Created by: guenaler on 2023-12-04; Database: WA_Denver

Location Information						
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.18-T02N-R63W		3285112.361	1295942.638	40°08'28.5216"N	104°28'48.5940"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOTR01 Guttersten YY18-785 (1582'FNL & 2611'FEL, SEC.18)	0.00	0.00	3285112.361	1295942.638	40°08'28.5216"N	104°28'48.5940"W
Rig on SLOTR01 Guttersten YY18-08 (1582'FNL & 2611'FEL, SEC.18) (RKB) to Ground level (At Slot: SLOTR01 Guttersten YY18-785 (1582'FNL & 2611'FEL, SEC.18))						
4926ft						
Mean Sea Level to Ground level (At Slot: SLOTR01 Guttersten YY18-785 (1582'FNL & 2611'FEL, SEC.18))						
0ft						
Rig on SLOTR01 Guttersten YY18-08 (1582'FNL & 2611'FEL, SEC.18) (RKB) to Mean Sea Level						
4926ft						

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
SHL	30.00	0.000	234.235	30.00	0.00	0.00	0.00	0.00
End of Tangent	2000.00	0.000	234.235	2000.00	0.00	0.00	0.00	0.00
Build (XS)	3948.73	38.975	234.235	3801.88	-372.67	-517.39	2.00	-155.66
KOP	6908.79	38.975	234.235	6103.11	-1460.82	-2028.10	0.00	-610.16
LP/TPZ	8142.76	90.000	359.073	6824.00	-874.54	-2516.36	9.00	114.84
VS Target 2500'	10697.40	90.000	359.073	6824.00	1679.76	-2557.71	0.00	2504.44
3D Arc (J)	10725.13	90.555	359.073	6823.87	1707.49	-2558.16	2.00	2530.38
BHL	15669.93	90.555	359.073	6776.00	6651.41	-2638.19	0.00	7155.51

Targets								
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
DP 455 Sec.07-T02N-R63W	N/A	0.00	0.00	0.00	3285112.36	1295942.64	40°08'28.5216"N	104°28'48.5940"W
DP 455 Sec.18-T02N-R63W	N/A	0.00	0.00	0.00	3285112.36	1295942.64	40°08'28.5216"N	104°28'48.5940"W
DP 455 Section 18 half section	N/A	0.00	0.00	0.00	3285112.36	1295942.64	40°08'28.5216"N	104°28'48.5940"W
Guttersten YY18-785 BHL (200'FNL & 330'FWL, SEC.07)	15669.93	6776.00	6651.41	-2638.19	3282474.29	1302593.76	40°09'34.5455"N	104°29'21.5856"W
Guttersten YY18-785 LP (2441'FNL & 330'FWL, SEC.18)	8142.76	6824.00	-874.54	-2516.36	3282596.11	1295966.14	40°08'20.1646"N	104°29'21.1214"W
Guttersten YY18-785 VS TARGET 2500'	10697.40	6824.00	1679.76	-2557.71	3282554.77	1297622.33	40°08'45.4095"N	104°29'21.2789"W
DP 455 East Headline (200'FNL/330'FWL/FWL)	N/A	6933.00	2149.11	-5211.47	3279901.12	1298091.66	40°08'50.3448"N	104°29'55.3812"W

Survey Program					
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
30.00	1950.00	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		Guttersten YY18-785 PWB
1950.00	15669.93	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		Guttersten YY18-785 PWB



BGM (1900.0 to 2024.0) Dip: 66.36° Field: 51732.8 nT
 Magnetic North is 7.62 degrees East of True North (at 3/29/2023)
 Grid North is 0.66 degrees East of True North
 To correct azimuth from True to Grid subtract 0.66 degrees
 To correct azimuth from Magnetic to Grid add 0.66 degrees



Planned Wellpath Report

Guttersen YY18-785 (REV-B.1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

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	2/5/2024 at 3:21:36 PM
Convergence at slot	0.66° 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	0.00	0.00	3285112.36	1295942.64	40.1412560°	-104.4801650°
Facility Reference Pt			3285112.36	1295942.64	40.1412560°	-104.4801650°
Field Reference Pt			3000000.00	4454105.15	48.7761986°	-105.5000000°

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB) to Facility Vertical Datum	4926.00ft
Horizontal Reference Pt	Slot	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB) to Mean Sea Level	4926.00ft
Vertical Reference Pt	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB)	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB) to Ground Level at Slot (SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18))	4926.00ft
MD Reference Pt	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	338.36°



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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

WELLPATH DATA (176 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	234.235	0.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
30.00	0.000	234.235	30.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	SHL
130.00†	0.000	234.235	130.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
230.00†	0.000	234.235	230.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
330.00†	0.000	234.235	330.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
430.00†	0.000	234.235	430.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
530.00†	0.000	234.235	530.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
630.00†	0.000	234.235	630.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
730.00†	0.000	234.235	730.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
830.00†	0.000	234.235	830.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
930.00†	0.000	234.235	930.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1030.00†	0.000	234.235	1030.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1048.22†	0.000	234.235	1048.22	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	Upper Pierre Aquifer Top
1130.00†	0.000	234.235	1130.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1230.00†	0.000	234.235	1230.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1330.00†	0.000	234.235	1330.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1430.00†	0.000	234.235	1430.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1530.00†	0.000	234.235	1530.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1630.00†	0.000	234.235	1630.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1720.22†	0.000	234.235	1720.22	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	Upper Pierre Aquifer Base
1730.00†	0.000	234.235	1730.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1830.00†	0.000	234.235	1830.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
1930.00†	0.000	234.235	1930.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	
2000.00	0.000	234.235	2000.00	0.00	0.00	0.00	40.1412560	-104.4801650	0.00	End of Tangent
2030.00†	0.600	234.235	2030.00	-0.04	-0.09	-0.13	40.1412558	-104.4801655	2.00	
2130.00†	2.600	234.235	2129.96	-0.72	-1.72	-2.39	40.1412513	-104.4801736	2.00	
2230.00†	4.600	234.235	2229.75	-2.25	-5.39	-7.49	40.1412414	-104.4801920	2.00	
2330.00†	6.600	234.235	2329.27	-4.63	-11.10	-15.41	40.1412260	-104.4802206	2.00	
2430.00†	8.600	234.235	2428.39	-7.86	-18.83	-26.14	40.1412052	-104.4802593	2.00	
2530.00†	10.600	234.235	2526.98	-11.93	-28.57	-39.67	40.1411788	-104.4803080	2.00	
2630.00†	12.600	234.235	2624.93	-16.84	-40.32	-55.98	40.1411471	-104.4803669	2.00	
2730.00†	14.600	234.235	2722.13	-22.58	-54.07	-75.06	40.1411100	-104.4804357	2.00	
2830.00†	16.600	234.235	2818.44	-29.15	-69.78	-96.88	40.1410675	-104.4805144	2.00	
2930.00†	18.600	234.235	2913.75	-36.53	-87.45	-121.42	40.1410198	-104.4806028	2.00	
3030.00†	20.600	234.235	3007.95	-44.72	-107.06	-148.63	40.1409668	-104.4807010	2.00	
3130.00†	22.600	234.235	3100.93	-53.70	-128.57	-178.50	40.1409087	-104.4808087	2.00	
3230.00†	24.600	234.235	3192.56	-63.48	-151.97	-210.99	40.1408455	-104.4809258	2.00	
3330.00†	26.600	234.235	3282.74	-74.02	-177.22	-246.04	40.1407773	-104.4810523	2.00	
3430.00†	28.600	234.235	3371.35	-85.33	-204.30	-283.64	40.1407042	-104.4811878	2.00	
3530.00†	30.600	234.235	3458.30	-97.39	-233.17	-323.71	40.1406262	-104.4813323	2.00	
3630.00†	32.600	234.235	3543.46	-110.18	-263.79	-366.23	40.1405435	-104.4814856	2.00	
3730.00†	34.600	234.235	3626.75	-123.69	-296.13	-411.13	40.1404561	-104.4816476	2.00	
3830.00†	36.600	234.235	3708.06	-137.90	-330.15	-458.36	40.1403642	-104.4818179	2.00	
3930.00†	38.600	234.235	3787.28	-152.79	-365.81	-507.87	40.1402679	-104.4819964	2.00	
3948.73	38.975	234.235	3801.88	-155.66	-372.67	-517.39	40.1402494	-104.4820307	2.00	Build (XS)



Planned Wellpath Report

Guttersen YY18-785 (REV-B.1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

WELLPATH DATA (176 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4030.00†	38.975	234.235	3865.06	-168.14	-402.55	-558.87	40.1401687	-104.4821803	0.00	
4087.62†	38.975	234.235	3909.86	-176.98	-423.73	-588.27	40.1401115	-104.4822863	0.00	Parkman
4130.00†	38.975	234.235	3942.81	-183.49	-439.31	-609.90	40.1400694	-104.4823643	0.00	
4230.00†	38.975	234.235	4020.55	-198.85	-476.07	-660.94	40.1399701	-104.4825484	0.00	
4330.00†	38.975	234.235	4098.29	-214.20	-512.83	-711.97	40.1398708	-104.4827324	0.00	
4430.00†	38.975	234.235	4176.03	-229.55	-549.59	-763.01	40.1397715	-104.4829164	0.00	
4515.96†	38.975	234.235	4242.86	-242.75	-581.19	-806.88	40.1396862	-104.4830746	0.00	Sussex
4530.00†	38.975	234.235	4253.78	-244.91	-586.35	-814.05	40.1396722	-104.4831005	0.00	
4630.00†	38.975	234.235	4331.52	-260.26	-623.11	-865.08	40.1395729	-104.4832845	0.00	
4730.00†	38.975	234.235	4409.26	-275.62	-659.87	-916.12	40.1394736	-104.4834686	0.00	
4830.00†	38.975	234.235	4487.00	-290.97	-696.63	-967.16	40.1393743	-104.4836526	0.00	
4930.00†	38.975	234.235	4564.75	-306.33	-733.39	-1018.19	40.1392750	-104.4838366	0.00	
5030.00†	38.975	234.235	4642.49	-321.68	-770.16	-1069.23	40.1391757	-104.4840207	0.00	
5130.00†	38.975	234.235	4720.23	-337.04	-806.92	-1120.27	40.1390764	-104.4842047	0.00	
5230.00†	38.975	234.235	4797.97	-352.39	-843.68	-1171.30	40.1389771	-104.4843887	0.00	
5330.00†	38.975	234.235	4875.72	-367.74	-880.44	-1222.34	40.1388778	-104.4845727	0.00	
5430.00†	38.975	234.235	4953.46	-383.10	-917.20	-1273.38	40.1387785	-104.4847568	0.00	
5530.00†	38.975	234.235	5031.20	-398.45	-953.96	-1324.41	40.1386792	-104.4849408	0.00	
5559.96†	38.975	234.235	5054.49	-403.05	-964.97	-1339.70	40.1386495	-104.4849959	0.00	Shannon
5630.00†	38.975	234.235	5108.94	-413.81	-990.72	-1375.45	40.1385799	-104.4851248	0.00	
5730.00†	38.975	234.235	5186.69	-429.16	-1027.48	-1426.49	40.1384806	-104.4853089	0.00	
5830.00†	38.975	234.235	5264.43	-444.52	-1064.24	-1477.52	40.1383813	-104.4854929	0.00	
5930.00†	38.975	234.235	5342.17	-459.87	-1101.01	-1528.56	40.1382820	-104.4856769	0.00	
6030.00†	38.975	234.235	5419.91	-475.23	-1137.77	-1579.60	40.1381827	-104.4858609	0.00	
6130.00†	38.975	234.235	5497.66	-490.58	-1174.53	-1630.63	40.1380834	-104.4860450	0.00	
6230.00†	38.975	234.235	5575.40	-505.93	-1211.29	-1681.67	40.1379841	-104.4862290	0.00	
6330.00†	38.975	234.235	5653.14	-521.29	-1248.05	-1732.70	40.1378848	-104.4864130	0.00	
6430.00†	38.975	234.235	5730.88	-536.64	-1284.81	-1783.74	40.1377855	-104.4865971	0.00	
6530.00†	38.975	234.235	5808.63	-552.00	-1321.57	-1834.78	40.1376862	-104.4867811	0.00	
6630.00†	38.975	234.235	5886.37	-567.35	-1358.33	-1885.81	40.1375869	-104.4869651	0.00	
6730.00†	38.975	234.235	5964.11	-582.71	-1395.09	-1936.85	40.1374876	-104.4871491	0.00	
6830.00†	38.975	234.235	6041.85	-598.06	-1431.86	-1987.89	40.1373883	-104.4873331	0.00	
6832.86†	38.975	234.235	6044.08	-598.50	-1432.91	-1989.35	40.1373855	-104.4873384	0.00	Teepee Buttes
6908.79	38.975	234.235	6103.11	-610.16	-1460.82	-2028.10	40.1373101	-104.4874781	0.00	KOP
6930.00†	38.097	236.957	6119.70	-613.08	-1468.29	-2039.00	40.1372899	-104.4875174	9.00	
7030.00†	34.913	251.142	6200.21	-617.81	-1494.41	-2092.05	40.1372199	-104.4877082	9.00	
7130.00†	33.603	266.997	6283.03	-607.56	-1505.13	-2146.87	40.1371922	-104.4879047	9.00	
7230.00†	34.387	283.070	6366.11	-582.59	-1500.19	-2202.13	40.1372075	-104.4881021	9.00	
7330.00†	37.129	297.776	6447.40	-543.51	-1479.69	-2256.45	40.1372654	-104.4882956	9.00	
7430.00†	41.437	310.287	6524.91	-491.29	-1444.16	-2308.50	40.1373646	-104.4884803	9.00	
7530.00†	46.872	320.609	6596.72	-427.21	-1394.46	-2357.00	40.1375025	-104.4886517	9.00	
7630.00†	53.077	329.138	6661.08	-352.85	-1331.82	-2400.75	40.1376758	-104.4888056	9.00	
7658.51†	54.949	331.307	6677.83	-330.01	-1311.79	-2412.20	40.1377312	-104.4888457	9.00	Sharon Springs
7723.33†	59.336	335.887	6713.00	-275.79	-1263.04	-2436.35	40.1378658	-104.4889301	9.00	Top A Chalk, Top A Marl
7730.00†	59.797	336.334	6716.38	-270.04	-1257.77	-2438.68	40.1378803	-104.4889382	9.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

WELLPATH DATA (176 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7828.97†	66.785	342.524	6760.87	-181.76	-1175.06	-2469.57	40.1381083	-104.4890453	9.00	Top B Chalk
7830.00†	66.859	342.585	6761.28	-180.82	-1174.16	-2469.85	40.1381108	-104.4890463	9.00	
7930.00†	74.142	348.199	6794.66	-87.38	-1083.02	-2493.50	40.1383617	-104.4891271	9.00	
7936.43†	74.616	348.545	6796.39	-81.28	-1076.95	-2494.75	40.1383784	-104.4891313	9.00	Top B Marl
8030.00†	81.559	353.418	6815.70	7.96	-986.61	-2509.03	40.1386268	-104.4891788	9.00	
8130.00†	89.043	358.437	6823.89	102.88	-887.30	-2516.08	40.1388996	-104.4891999	9.00	
8142.76	90.000	359.073	6824.00 ¹	114.84	-874.54	-2516.36	40.1389346	-104.4892004	9.00	LP/TPZ
8230.00†	90.000	359.073	6824.00	196.44	-787.31	-2517.77	40.1391741	-104.4892019	0.00	
8330.00†	90.000	359.073	6824.00	289.98	-687.32	-2519.39	40.1394486	-104.4892036	0.00	
8430.00†	90.000	359.073	6824.00	383.52	-587.34	-2521.01	40.1397231	-104.4892053	0.00	
8530.00†	90.000	359.073	6824.00	477.06	-487.35	-2522.63	40.1399976	-104.4892070	0.00	
8630.00†	90.000	359.073	6824.00	570.60	-387.36	-2524.25	40.1402721	-104.4892087	0.00	
8730.00†	90.000	359.073	6824.00	664.14	-287.38	-2525.86	40.1405466	-104.4892104	0.00	
8830.00†	90.000	359.073	6824.00	757.68	-187.39	-2527.48	40.1408211	-104.4892122	0.00	
8930.00†	90.000	359.073	6824.00	851.22	-87.40	-2529.10	40.1410956	-104.4892139	0.00	
9030.00†	90.000	359.073	6824.00	944.76	12.58	-2530.72	40.1413701	-104.4892156	0.00	
9130.00†	90.000	359.073	6824.00	1038.30	112.57	-2532.34	40.1416446	-104.4892173	0.00	
9230.00†	90.000	359.073	6824.00	1131.84	212.56	-2533.96	40.1419191	-104.4892190	0.00	
9330.00†	90.000	359.073	6824.00	1225.38	312.55	-2535.58	40.1421936	-104.4892207	0.00	
9430.00†	90.000	359.073	6824.00	1318.92	412.53	-2537.19	40.1424681	-104.4892224	0.00	
9530.00†	90.000	359.073	6824.00	1412.46	512.52	-2538.81	40.1427426	-104.4892241	0.00	
9630.00†	90.000	359.073	6824.00	1506.00	612.51	-2540.43	40.1430171	-104.4892259	0.00	
9730.00†	90.000	359.073	6824.00	1599.54	712.49	-2542.05	40.1432916	-104.4892276	0.00	
9830.00†	90.000	359.073	6824.00	1693.08	812.48	-2543.67	40.1435661	-104.4892293	0.00	
9930.00†	90.000	359.073	6824.00	1786.62	912.47	-2545.29	40.1438406	-104.4892310	0.00	
10030.00†	90.000	359.073	6824.00	1880.15	1012.45	-2546.91	40.1441151	-104.4892327	0.00	
10130.00†	90.000	359.073	6824.00	1973.69	1112.44	-2548.52	40.1443896	-104.4892344	0.00	
10230.00†	90.000	359.073	6824.00	2067.23	1212.43	-2550.14	40.1446641	-104.4892361	0.00	
10330.00†	90.000	359.073	6824.00	2160.77	1312.41	-2551.76	40.1449386	-104.4892378	0.00	
10430.00†	90.000	359.073	6824.00	2254.31	1412.40	-2553.38	40.1452131	-104.4892396	0.00	
10530.00†	90.000	359.073	6824.00	2347.85	1512.39	-2555.00	40.1454876	-104.4892413	0.00	
10630.00†	90.000	359.073	6824.00	2441.39	1612.38	-2556.62	40.1457621	-104.4892430	0.00	
10697.40	90.000	359.073	6824.00 ²	2504.44	1679.76	-2557.71	40.1459471	-104.4892441	0.00	VS Target 2500'
10725.13	90.555	359.073	6823.87	2530.38	1707.49	-2558.16	40.1460232	-104.4892446	2.00	3D Arc (J)
10730.00†	90.555	359.073	6823.82	2534.93	1712.36	-2558.23	40.1460366	-104.4892447	0.00	
10830.00†	90.555	359.073	6822.85	2628.47	1812.34	-2559.85	40.1463110	-104.4892464	0.00	
10930.00†	90.555	359.073	6821.88	2722.00	1912.33	-2561.47	40.1465855	-104.4892481	0.00	
11030.00†	90.555	359.073	6820.91	2815.54	2012.31	-2563.09	40.1468600	-104.4892498	0.00	
11130.00†	90.555	359.073	6819.95	2909.07	2112.29	-2564.71	40.1471345	-104.4892515	0.00	
11230.00†	90.555	359.073	6818.98	3002.61	2212.27	-2566.33	40.1474090	-104.4892533	0.00	
11330.00†	90.555	359.073	6818.01	3096.14	2312.25	-2567.95	40.1476835	-104.4892550	0.00	
11430.00†	90.555	359.073	6817.04	3189.68	2412.24	-2569.56	40.1479580	-104.4892567	0.00	
11530.00†	90.555	359.073	6816.07	3283.21	2512.22	-2571.18	40.1482325	-104.4892584	0.00	
11630.00†	90.555	359.073	6815.11	3376.75	2612.20	-2572.80	40.1485069	-104.4892601	0.00	
11730.00†	90.555	359.073	6814.14	3470.29	2712.18	-2574.42	40.1487814	-104.4892618	0.00	



Planned Wellpath Report

Guttersen YY18-785 (REV-B.1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

WELLPATH DATA (176 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11830.00†	90.555	359.073	6813.17	3563.82	2812.17	-2576.04	40.1490559	-104.4892635	0.00	
11930.00†	90.555	359.073	6812.20	3657.36	2912.15	-2577.66	40.1493304	-104.4892653	0.00	
12030.00†	90.555	359.073	6811.23	3750.89	3012.13	-2579.28	40.1496049	-104.4892670	0.00	
12130.00†	90.555	359.073	6810.27	3844.43	3112.11	-2580.89	40.1498794	-104.4892687	0.00	
12230.00†	90.555	359.073	6809.30	3937.96	3212.09	-2582.51	40.1501539	-104.4892704	0.00	
12330.00†	90.555	359.073	6808.33	4031.50	3312.08	-2584.13	40.1504283	-104.4892721	0.00	
12430.00†	90.555	359.073	6807.36	4125.03	3412.06	-2585.75	40.1507028	-104.4892738	0.00	
12530.00†	90.555	359.073	6806.39	4218.57	3512.04	-2587.37	40.1509773	-104.4892755	0.00	
12630.00†	90.555	359.073	6805.43	4312.10	3612.02	-2588.99	40.1512518	-104.4892772	0.00	
12730.00†	90.555	359.073	6804.46	4405.64	3712.01	-2590.61	40.1515263	-104.4892790	0.00	
12830.00†	90.555	359.073	6803.49	4499.17	3811.99	-2592.22	40.1518008	-104.4892807	0.00	
12930.00†	90.555	359.073	6802.52	4592.71	3911.97	-2593.84	40.1520753	-104.4892824	0.00	
13030.00†	90.555	359.073	6801.55	4686.24	4011.95	-2595.46	40.1523497	-104.4892841	0.00	
13130.00†	90.555	359.073	6800.59	4779.78	4111.93	-2597.08	40.1526242	-104.4892858	0.00	
13230.00†	90.555	359.073	6799.62	4873.31	4211.92	-2598.70	40.1528987	-104.4892875	0.00	
13330.00†	90.555	359.073	6798.65	4966.85	4311.90	-2600.32	40.1531732	-104.4892892	0.00	
13430.00†	90.555	359.073	6797.68	5060.39	4411.88	-2601.94	40.1534477	-104.4892909	0.00	
13530.00†	90.555	359.073	6796.71	5153.92	4511.86	-2603.55	40.1537222	-104.4892927	0.00	
13563.53†	90.555	359.073	6796.39	5185.28	4545.39	-2604.10	40.1538142	-104.4892932	0.00	Top B Marl
13630.00†	90.555	359.073	6795.75	5247.46	4611.85	-2605.17	40.1539967	-104.4892944	0.00	
13730.00†	90.555	359.073	6794.78	5340.99	4711.83	-2606.79	40.1542711	-104.4892961	0.00	
13830.00†	90.555	359.073	6793.81	5434.53	4811.81	-2608.41	40.1545456	-104.4892978	0.00	
13930.00†	90.555	359.073	6792.84	5528.06	4911.79	-2610.03	40.1548201	-104.4892995	0.00	
14030.00†	90.555	359.073	6791.87	5621.60	5011.77	-2611.65	40.1550946	-104.4893012	0.00	
14130.00†	90.555	359.073	6790.91	5715.13	5111.76	-2613.27	40.1553691	-104.4893029	0.00	
14230.00†	90.555	359.073	6789.94	5808.67	5211.74	-2614.88	40.1556436	-104.4893047	0.00	
14330.00†	90.555	359.073	6788.97	5902.20	5311.72	-2616.50	40.1559181	-104.4893064	0.00	
14430.00†	90.555	359.073	6788.00	5995.74	5411.70	-2618.12	40.1561925	-104.4893081	0.00	
14530.00†	90.555	359.073	6787.03	6089.27	5511.69	-2619.74	40.1564670	-104.4893098	0.00	
14630.00†	90.555	359.073	6786.07	6182.81	5611.67	-2621.36	40.1567415	-104.4893115	0.00	
14730.00†	90.555	359.073	6785.10	6276.34	5711.65	-2622.98	40.1570160	-104.4893132	0.00	
14830.00†	90.555	359.073	6784.13	6369.88	5811.63	-2624.60	40.1572905	-104.4893149	0.00	
14930.00†	90.555	359.073	6783.16	6463.42	5911.61	-2626.21	40.1575650	-104.4893166	0.00	
15030.00†	90.555	359.073	6782.19	6556.95	6011.60	-2627.83	40.1578395	-104.4893184	0.00	
15130.00†	90.555	359.073	6781.23	6650.49	6111.58	-2629.45	40.1581139	-104.4893201	0.00	
15230.00†	90.555	359.073	6780.26	6744.02	6211.56	-2631.07	40.1583884	-104.4893218	0.00	
15330.00†	90.555	359.073	6779.29	6837.56	6311.54	-2632.69	40.1586629	-104.4893235	0.00	
15430.00†	90.555	359.073	6778.32	6931.09	6411.53	-2634.31	40.1589374	-104.4893252	0.00	
15530.00†	90.555	359.073	6777.35	7024.63	6511.51	-2635.93	40.1592119	-104.4893269	0.00	
15630.00†	90.555	359.073	6776.39	7118.16	6611.49	-2637.54	40.1594864	-104.4893286	0.00	
15669.93	90.555	359.073	6776.00 ³	7155.51	6651.41	-2638.19	40.1595960	-104.4893293	0.00	BHL

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

HOLE & CASING SECTIONS - Ref Wellbore: Guttersen YY18-785 PWB Ref Wellpath: Guttersen YY18-785 (REV-B.1) PWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	30.00	1950.00	1920.00	30.00	1950.00	0.00	0.00	0.00	0.00

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
DP 455 Sec.07-T02N-R63W	N/A	0.00	0.00	0.00	3285112.36	1295942.64	40.1412560	-104.4801650	polygon
2D Polygon: dimensions not calculated									
DP 455 Sec.18-T02N-R63W	N/A	0.00	0.00	0.00	3285112.36	1295942.64	40.1412560	-104.4801650	polygon
2D Polygon: dimensions not calculated									
DP 455 Section 18 half section	N/A	0.00	0.00	0.00	3285112.36	1295942.64	40.1412560	-104.4801650	polygon
2D Polygon: dimensions not calculated									
3) Guttersen YY18-785 BHL (200'FNL & 330'FWL,SEC.07)	15669.93	6776.00	6651.41	-2638.19	3282474.29	1302593.76	40.1595960	-104.4893293	point
Guttersen YY18-785 BPZ (200'FNL & 330'FWL,SEC.07)	N/A	6776.00	6651.41	-2638.19	3282474.29	1302593.76	40.1595960	-104.4893293	point
1) Guttersen YY18-785 LP (2441'FNL & 330'FWL,SEC.18)	8142.76	6824.00	-874.54	-2516.36	3282596.11	1295068.14	40.1389346	-104.4892004	point
2) Guttersen YY18-785 VS TARGET 2500'	10697.40	6824.00	1679.76	-2557.71	3282554.77	1297622.33	40.1459471	-104.4892441	point
DP455 East Hardline (200'FNL/FSL&300'FEL/FWL)	N/A	6933.00	2149.11	-5211.47	3279901.12	1298091.66	40.1473180	-104.4987170	polygon
2D Polygon: dimensions not calculated									

SURVEY PROGRAM - Ref Wellbore: Guttersen YY18-785 PWB Ref Wellpath: Guttersen YY18-785 (REV-B.1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1950.00	OWSG MWD rev2 (MS+IFR1)		Guttersen YY18-785 PWB
1950.00	15669.93	OWSG MWD rev2 (MS+IFR1)		Guttersen YY18-785 PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1048.22	0.000	234.235	1048.22	Upper Pierre Aquifer Top
1720.22	0.000	234.235	1720.22	Upper Pierre Aquifer Base
4087.62	38.975	234.235	3909.86	Parkman
4515.96	38.975	234.235	4242.86	Sussex
5559.96	38.975	234.235	5054.49	Shannon
6832.86	38.975	234.235	6044.08	Teepee Buttes
7658.51	54.949	331.307	6677.83	Sharon Springs
7723.33	59.336	335.887	6713.00	Top A Chalk, Top A Marl
7828.97	66.785	342.524	6760.87	Top B Chalk
7936.43	74.616	348.545	6796.39	Top B Marl
13563.53	90.555	359.073	6796.39	Top B Marl

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	234.235	30.00	SHL
2000.00	0.000	234.235	2000.00	End of Tangent
3948.73	38.975	234.235	3801.88	Build (XS)
6908.79	38.975	234.235	6103.11	KOP
8142.76	90.000	359.073	6824.00	LP/TPZ
10697.40	90.000	359.073	6824.00	VS Target 2500'
10725.13	90.555	359.073	6823.87	3D Arc (J)
15669.93	90.555	359.073	6776.00	BHL



Closest Approach Clearance Summary Report

Guttersen YY18-785 (REV-B.1) PWP - SPE WPTS Stop Drilling HSE Risk (2017)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

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	2/9/2024 at 9:32:23 AM
Convergence at slot	0.66° 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	0.00	0.00	3285112.36	1295942.64	40°08'28.5216"N	104°28'48.5940"W
Facility Reference Pt			3285112.36	1295942.64	40°08'28.5216"N	104°28'48.5940"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.3150"N	105°30'0.0000"W

WELLPATH DATUM			
Calculation method	Minimum Curvature	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB) to Facility Vertical Datum	4926.00ft
Horizontal Reference Pt	Slot	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB) to Mean Sea Level	4926.00ft
Vertical Reference Pt	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB)	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB) to Ground Level at Slot (SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18))	4926.00ft
MD Reference Pt	Rig on SLOT#01 Guttersen YY18-08 (1582'FNL & 2611'FEL,SEC.18) (RKB)		
Field Vertical Reference	Mean Sea Level		

POSITIONAL UNCERTAINTY CALCULATION SETTINGS					
Ellipse Confidence Limit	3.50 Std Dev	Ellipse Start MD	30.00ft	Surface Position Uncertainty	included
Declination	7.62° East of TN	Dip Angle	66.36°	Mag Field Strength	51733 nT
Slot Surface Uncertainty @1SD		Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft	Vertical	3.000ft
Positional Uncertainty values in the WELLPATH DATA table are the projection of the ellipsoid of uncertainty onto the vertical and horizontal planes					



Closest Approach Clearance Summary Report

Guttersen YY18-785 (REV-B.1) PWP - SPE WPTS Stop Drilling HSE Risk (2017)



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL, SEC.18)		

PROXIMITY-SCAN RULE			
Rule Name	SPE WPTS Stop Drilling HSE Risk (2017)	Rule Based On	Ratio
Plane of Rule	Closest Approach	Threshold Value	1.00
Include Casing & Hole Size	yes	Apply Cone of Safety	no

HOLE & CASING SECTIONS - Ref Wellbore: Guttersen YY18-785 PWB Ref Wellpath: Guttersen YY18-785 (REV-B.1) PWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	30.00	1950.00	1920.00	30.00	1950.00	0.00	0.00	0.00	0.00

SURVEY PROGRAM - Ref Wellbore: Guttersen YY18-785 PWB Ref Wellpath: Guttersen YY18-785 (REV-B.1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1950.00	OWSG MWD rev2 (MS+IFR1)		Guttersen YY18-785 PWB
1950.00	15669.93	OWSG MWD rev2 (MS+IFR1)		Guttersen YY18-785 PWB



Closest Approach Clearance Summary Report

Guttersen YY18-785 (REV-B.1) PWP - SPE WPTS Stop Drilling HSE Risk (2017)



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 15669.93ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (31 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane												
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Wellbore Status	C-C Clearance Distance			Rule Separation Ratio			
						Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
YY Section 18	CUYKENDALL-LAUCK #3	CUYKENDALL-LAUCK #3 (05-123-08387)	CUYKENDALL-LAUCK #3	CUYKENDALL-LAUCK #3\No Surveys	Drilling	4480.58	67.83	8330.00	4482.61	0.01	8330.00	FAIL
YY Section 18	CUYKENDALL-LAUCK #2	CUYKENDALL-LAUCK #2 (05-123-07973)	CUYKENDALL-LAUCK #2	CUYKENDALL-LAUCK #2\No Surveys	Drilling	4265.23	95.67	8530.00	4269.52	0.02	8530.00	FAIL
YY Section 07	CUYKENDALL #24-7	CUYKENDALL #24-7 (05-123-10357)	CUYKENDALL #24-7	CUYKENDALL #24-7\No Surveys	Drilling	11218.37	1678.24	11218.37	11214.37	0.20	11214.37	FAIL
YY Section 18	ELMER KAUFMAN #1	ELMER KAUFMAN #1 (05-123-40000)	ELMER KAUFMAN #1	ELMER KAUFMAN #1\No Surveys	Drilling	3630.22	1738.59	3630.22	5319.69	0.34	5319.69	FAIL
YY Section 18	CUYKENDALL-LAUCK #1	CUYKENDALL-LAUCK #1 (05-123-07705)	CUYKENDALL-LAUCK #1	CUYKENDALL-LAUCK #1\No Surveys	Drilling	30.00	1128.31	9930.00	3220.42	0.35	9930.00	FAIL
YY Section 07	J.H. CUYKENDALL B #1	J.H. CUYKENDALL B #1 (05-123-09705)	J.H. CUYKENDALL B #1	J.H. CUYKENDALL B #1\No Surveys	Drilling	12544.70	3185.67	12544.70	12530.28	0.38	12530.28	FAIL
YY Section 18	ELMER KAUFMAN #2	ELMER KAUFMAN #2 (05-123-07611)	ELMER KAUFMAN #2	ELMER KAUFMAN #2\No Surveys	Drilling	4902.96	2832.97	4902.96	7069.19	0.41	7069.19	FAIL
YY Section 18	ELMER KAUFMAN #3	ELMER KAUFMAN #3 (05-123-07865)	ELMER KAUFMAN #3	ELMER KAUFMAN #3\No Surveys	Drilling	30.00	1991.42	8630.00	3938.09	0.54	8630.00	FAIL
YY Section 18	KAUFMAN #4	KAUFMAN #4 (05-123-07952)	KAUFMAN #4	KAUFMAN #4\No Surveys	Drilling	2981.33	3603.84	2981.33	7263.07	0.57	7263.07	FAIL
SEC.18-T02N-R63W	SLOT#02 Guttersen YY18-775 (1582'FNL & 2588'FEL,SEC.18)	Guttersen YY18-775	Guttersen YY18-775 PWB	Guttersen YY18-775 (REV-B.1) PWP	Planned	30.00	22.37	2000.00	2138.41	0.99	15669.93	FAIL
SEC.18-T02N-R63W	SLOT#03 Guttersen YY18-764 (1582'FNL & 2566'FEL,SEC.18)	Guttersen YY18-764	Guttersen YY18-764 PWB	Guttersen YY18-764 (REV-B.1) PWP	Planned	30.00	45.02	2000.00	2004.31	2.27	15669.93	PASS
SEC.18-T02N-R63W	SLOT#04 Guttersen YY18-754 (1582'FNL & 2543'FEL,SEC.18)	Guttersen YY18-754	Guttersen YY18-754 PWB	Guttersen YY18-754 (REV-B.1) PWP	Planned	30.00	67.39	2000.00	2083.82	3.44	15669.93	PASS
YY Section 18	JOHN CUYKENDALL UNIT #2	JOHN CUYKENDALL UNIT #2 (05-123-08083)	JOHN CUYKENDALL UNIT #2	JOHN CUYKENDALL UNIT #2\As-Drilled	Drilling	9885.56	285.58	9885.56	9885.56	3.79	9885.56	PASS
SEC.30-T03N-R63W	SLOT#10 GUTTERSEN YY06 -775 (601'FSL & 2540'FWL,SEC.30)	GUTTERSEN YY06 -775 (05-123-48642)	GUTTERSEN YY06 -775 AWB	GUTTERSEN YY06 -775 AWP	Drilling	15669.93	753.77	15669.93	15669.93	4.26	15669.93	PASS
SEC.12-T02N-R64W	SLOT#08 Guttersen Y12-715 (610'FSL & 2181'FEL,SEC.12)	Guttersen Y12-715	Guttersen Y12-715 PWB	Guttersen Y12-715 (REV-B.0) PWP	Planned	10786.59	660.35	10786.59	15669.93	4.54	15669.93	PASS
SEC.18-T02N-R63W	SLOT#05 Guttersen YY18-746(1582'FNL & 2521'FEL,SEC.18)	Guttersen YY18-746	Guttersen YY18-746 PWB	Guttersen YY18-746 (REV-B.1) PWP	Planned	30.00	90.03	2000.00	2002.68	4.75	15669.93	PASS
SEC.18-T02N-R63W	SLOT#06 Guttersen YY18-736 (1582'FNL & 2498'FEL,SEC.18)	Guttersen YY18-736	Guttersen YY18-736 PWB	Guttersen YY18-736 (REV-B.1) PWP	Planned	30.00	112.40	2000.00	2002.46	5.99	15669.93	PASS
SEC.30-T03N-R63W	SLOT#11 GUTTERSEN YY06 -766 (600'FSL & 2577'FWL,SEC.30)	GUTTERSEN YY06 -766 (05-123-48643)	GUTTERSEN YY06 -766 AWB	GUTTERSEN YY06 -766 AWP	Drilling	15669.93	1320.89	15669.93	15669.93	6.82	15669.93	PASS
SEC.18-T02N-R63W	SLOT#07 Guttersen YY18-726 (1583'FNL & 2476'FEL,SEC.18)	Guttersen YY18-726	Guttersen YY18-726 PWB	Guttersen YY18-726 (REV-B.1) PWP	Planned	30.00	135.05	2000.00	2002.50	7.24	15669.93	PASS
SEC.30-T03N-R63W	SLOT#09 GUTTERSEN YY06 -785 (601'FSL & 2502'FWL,SEC.30)	GUTTERSEN YY06 -785 (05-123-48640)	GUTTERSEN YY06 -785 AWB	GUTTERSEN YY06 -785 AWP	Drilling	15669.93	673.20	15669.93	15669.93	7.63	15669.93	PASS
SEC.18-T02N-R63W	SLOT#08 Guttersen YY18-715 (1583'FNL & 2453'FEL,SEC.18)	Guttersen YY18-715	Guttersen YY18-715 PWB	Guttersen YY18-715 (REV-B.1) PWP	Planned	30.00	157.42	2000.00	2002.65	8.47	15669.93	PASS
SEC.30-T03N-R63W	SLOT#12 GUTTERSEN YY06 -756 (600'FSL & 2615'FWL,SEC.30)	GUTTERSEN YY06 -756 (05-123-48641)	GUTTERSEN YY06 -756 AWB	GUTTERSEN YY06 -756 AWP	Drilling	15669.93	1941.95	15669.93	15669.93	9.76	15669.93	PASS
SEC.06-T02N-R63W	SLOT#07 Guttersen #6M-303 (05-123-38273)	Guttersen #6M-303	Guttersen #6M-303 AWB	Guttersen #6M-303 AWP	Drilling	15669.93	2728.19	15669.93	15669.93	14.33	15669.93	PASS
SEC.06-T02N-R63W	SLOT#06 Guttersen #6M-423 (05-123-38271)	Guttersen #6M-423	Guttersen #6M-423 AWB	Guttersen #6M-423 AWP	Drilling	15669.93	3087.29	15669.93	15669.93	15.90	15669.93	PASS
SEC.06-T02N-R63W	SLOT#05 Guttersen #6R-243 (05-123-38272)	Guttersen #6R-243	Guttersen #6R-243 AWB	Guttersen #6R-243 AWP	Drilling	15669.93	3394.28	15669.93	15669.93	17.50	15669.93	PASS



Closest Approach Clearance Summary Report

Guttersen YY18-785 (REV-B.1) PWP - SPE WPTS Stop Drilling HSE Risk (2017)



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Guttersen YY18-785
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.18-T02N-R63W	Wellbore	Guttersen YY18-785 PWB
Slot	SLOT#01 Guttersen YY18-785 (1582'FNL & 2611'FEL,SEC.18)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 15669.93ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (31 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane													
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Wellbore Status	C-C Clearance Distance			Rule Separation Ratio				
						Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status	
SEC.06-T02N-R63W	SLOT#04 Guttersen #6R-403 (05-123-39169)	Guttersen #6R-403	Guttersen #6R-403 AWB	Guttersen #6R-403 AWP	Drilling	15669.93	3697.69	15669.93	15669.93	18.78	15669.93	PASS	
SEC.06-T02N-R63W	SLOT#03 Guttersen #6R-323 (05-123-38275)	Guttersen #6R-323	Guttersen #6R-323 AWB	Guttersen #6R-323 AWP	Drilling	15669.93	4339.02	15669.93	15669.93	22.52	15669.93	PASS	
SEC.06-T02N-R63W	SLOT#02 Guttersen #6U-443 (05-123-38274)	Guttersen #6U-443 (05-123-38274)	Guttersen #6U-443 AWB	Guttersen #6U-443 AWP	Drilling	15669.93	4657.40	15669.93	15669.93	23.94	15669.93	PASS	
SEC.06-T02N-R63W	SLOT#01 Guttersen 6U-203(75'FNL&414'FEL,SEC.06)	Guttersen 6U-203 (05-123-38279)	Guttersen 6U-203 AWB	Guttersen 6U-203 AWP	Drilling	15669.93	4969.93	15669.93	15669.93	25.58	15669.93	PASS	
YY Section 18	EWS #4	EWS #4 (05-123-44167)	EWS #4	EWS #4\MWD	Drilling	2097.38	2584.25	2097.38	5175.87	60.49	6830.00	PASS	
YY Section 18	EWS #4B	EWS #4B ((05-123-48766)	Wellbore #1	Wellbore #1\As-Drilled	Drilling	206.12	2592.55	206.12	550.23	76.07	15330.00	PASS	