

# NOBLE ENERGY, INC



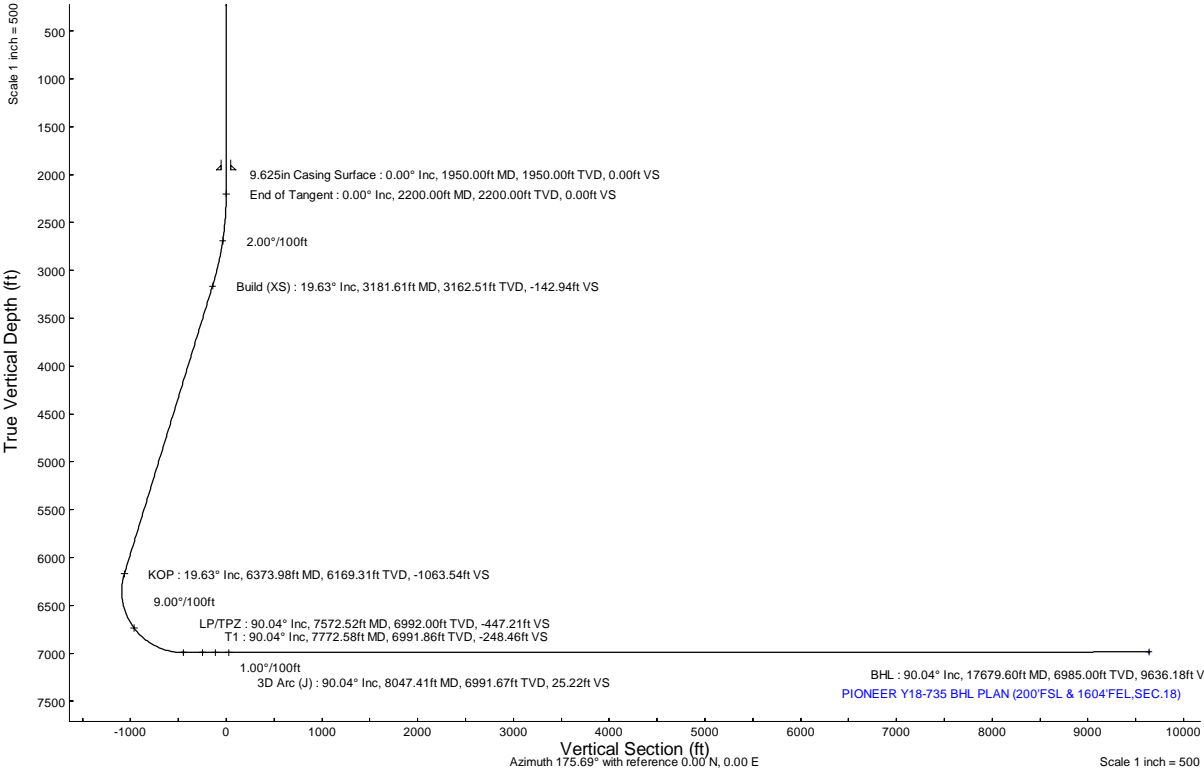
Location:	COLORADO	Slot:	SLOT#21 PIONEER Y18-735 (681°FNL & 2240°FEL,SEC.07)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	Pioneer Y18-735
Facility:	SEC.07-T02N-R64W	Wellbore:	Pioneer Y18-735 PWB

Plot reference wellpath is Pioneer Y18-735 (REV-1.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to (4885GL+30KB@4915RKB) (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to (4885GL+30KB@4915RKB) (RKB)	Scale: True distance
(4885GL+30KB@4915RKB) (RKB) to Mean Sea Level: 4915 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Mud line (At Slot: SLOT#21 PIONEER Y18-735 (681°FNL & 2240°FEL,SEC.07)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: guesaler on 2022-05-23; Database: WA_Denver

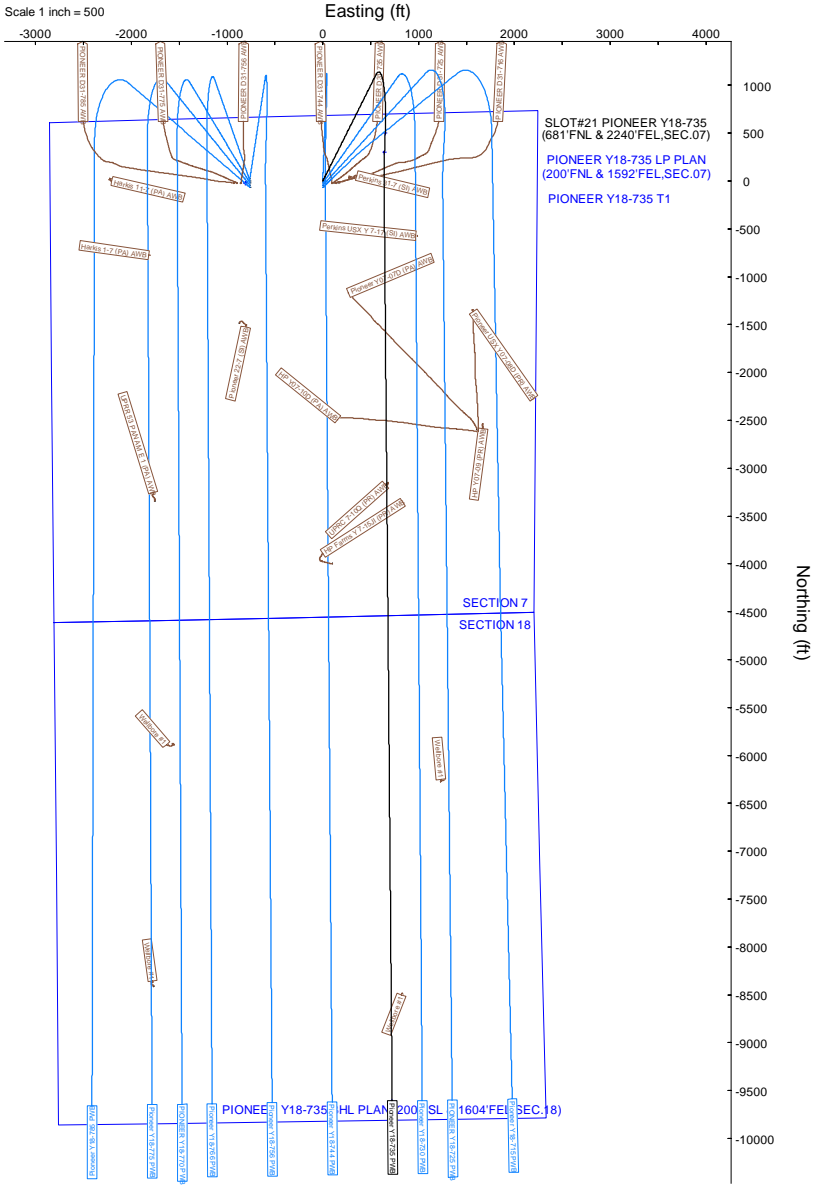
Location Information					
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.07-T02N-R64W		325269.032	1301719.599	40°09'29.0880"N	104°35'45.7080"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
SLOT#21 PIONEER Y18-735 (681°FNL & 2240°FEL,SEC.07)	20.75	926.15	3253585.145	1301740.351	40°09'29.1996"N
(4885GL+30KB@4915RKB) (RKB) to Mud line (At Slot: SLOT#21 PIONEER Y18-735 (681°FNL & 2240°FEL,SEC.07))					4915ft
Mean Sea Level to Mud line (At Slot: SLOT#21 PIONEER Y18-735 (681°FNL & 2240°FEL,SEC.07))					0ft
(4885GL+30KB@4915RKB) (RKB) to Mean Sea Level					4915ft

Targets							
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
PIONEER Y18-735 SECTION 18	NA	0.00	-23.20	-808.73	3252776.45	1301717.15	40°09'29.0520"N
PIONEER Y18-735 SECTION 7	NA	0.00	-23.20	-808.73	3252776.45	1301717.15	40°09'29.0520"N
PIONEER Y18-735 BHL PLAN (200°FSL & 1604°FEL,SEC.18)	17679.60	6985.00	-9608.98	723.52	3254308.63	1292131.79	40°07'54.1747"N
PIONEER Y18-735 T1	7772.58	6991.86	297.61	643.40	3254228.52	1302037.95	40°09'32.0753"N
PIONEER Y18-735 LP PLAN (200°FNL & 1592°FEL,SEC.07)	7572.52	6992.00	497.52	651.24	3254236.36	1302237.85	40°09'34.0499"N

Bottom Hole Location									
MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
17679.60	90.040	179.499	6985.00	-9608.98	723.52	3254308.63	1292131.79	40°07'54.1747"N	104°35'25.7290"W



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	26.566	30.00	0.00	0.00	0.00	0.00
End of Tangent	2200.00	0.000	26.566	2200.00	0.00	0.00	0.00	0.00
Build (XS)	3181.61	19.632	26.566	3162.51	148.95	74.48	2.00	-142.94
KOP	6373.98	19.632	26.566	6169.31	1108.28	554.17	0.00	-1063.54
LP/TPZ	7572.52	90.040	182.247	6992.00	497.52	651.24	9.00	-447.21
T1	7772.58	90.040	182.247	6991.86	297.61	643.40	0.00	-248.46
3D Arc (J)	8047.41	90.040	179.499	6991.67	22.84	639.21	1.00	25.22
BHL	17679.60	90.040	179.499	6985.00	-9608.98	723.52	0.00	9636.18





Planned Wellpath Report  
Pioneer Y18-735 (REV-1.0) PWP  
Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

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	0.999958	Report Generated	5/23/2022 at 7:43:18 AM
Convergence at slot	0.59° 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	20.75	926.15	3253585.15	1301740.35	40°09'29.1996"N	104°35'33.7776"W
Facility Reference Pt			3252659.03	1301719.60	40°09'29.0880"N	104°35'45.7080"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.3150"N	105°30'0.0000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	(4885'GL+30'KB@4915'RKB) (RKB) to Facility Vertical Datum	4915.00ft
Horizontal Reference Pt	Slot	(4885'GL+30'KB@4915'RKB) (RKB) to Mean Sea Level	4915.00ft
Vertical Reference Pt	(4885'GL+30'KB@4915'RKB) (RKB)	(4885'GL+30'KB@4915'RKB) (RKB) to Mud Line at Slot (SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07))	4915.00ft
MD Reference Pt	(4885'GL+30'KB@4915'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	175.69°



Planned Wellpath Report  
Pioneer Y18-735 (REV-1.0) PWP  
Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

WELLPATH DATA (185 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	26.566	0.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
30.00	0.000	26.566	30.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	SHL
130.00†	0.000	26.566	130.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
230.00†	0.000	26.566	230.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
330.00†	0.000	26.566	330.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
430.00†	0.000	26.566	430.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
530.00†	0.000	26.566	530.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
630.00†	0.000	26.566	630.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
730.00†	0.000	26.566	730.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
830.00†	0.000	26.566	830.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
930.00†	0.000	26.566	930.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1030.00†	0.000	26.566	1030.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1130.00†	0.000	26.566	1130.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1230.00†	0.000	26.566	1230.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1330.00†	0.000	26.566	1330.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1430.00†	0.000	26.566	1430.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1530.00†	0.000	26.566	1530.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1630.00†	0.000	26.566	1630.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1730.00†	0.000	26.566	1730.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1830.00†	0.000	26.566	1830.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
1930.00†	0.000	26.566	1930.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
2030.00†	0.000	26.566	2030.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
2130.00†	0.000	26.566	2130.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	
2200.00	0.000	26.566	2200.00	0.00	0.00	0.00	40°09'29.1996"N	104°35'33.7776"W	0.00	End of Tangent
2230.00†	0.600	26.566	2230.00	-0.13	0.14	0.07	40°09'29.2010"N	104°35'33.7767"W	2.00	
2330.00†	2.600	26.566	2329.96	-2.53	2.64	1.32	40°09'29.2255"N	104°35'33.7603"W	2.00	
2430.00†	4.600	26.566	2429.75	-7.92	8.25	4.13	40°09'29.2807"N	104°35'33.7234"W	2.00	
2530.00†	6.600	26.566	2529.27	-16.30	16.98	8.49	40°09'29.3665"N	104°35'33.6660"W	2.00	
2630.00†	8.600	26.566	2628.39	-27.65	28.81	14.41	40°09'29.4828"N	104°35'33.5883"W	2.00	
2730.00†	10.600	26.566	2726.98	-41.96	43.73	21.86	40°09'29.6295"N	104°35'33.4903"W	2.00	
2830.00†	12.600	26.566	2824.93	-59.22	61.71	30.86	40°09'29.8063"N	104°35'33.3721"W	2.00	
2930.00†	14.600	26.566	2922.13	-79.40	82.74	41.37	40°09'30.0130"N	104°35'33.2339"W	2.00	
3030.00†	16.600	26.566	3018.44	-102.48	106.79	53.40	40°09'30.2495"N	104°35'33.0758"W	2.00	
3130.00†	18.600	26.566	3113.75	-128.43	133.83	66.92	40°09'30.5153"N	104°35'32.8981"W	2.00	
3181.61	19.632	26.566	3162.51	-142.94	148.95	74.48	40°09'30.6639"N	104°35'32.7988"W	2.00	Build (XS)
3230.00†	19.632	26.566	3208.09	-156.89	163.49	81.75	40°09'30.8069"N	104°35'32.7032"W	0.00	
3330.00†	19.632	26.566	3302.28	-185.73	193.54	96.78	40°09'31.1023"N	104°35'32.5057"W	0.00	
3430.00†	19.632	26.566	3396.47	-214.57	223.59	111.80	40°09'31.3977"N	104°35'32.3083"W	0.00	
3530.00†	19.632	26.566	3490.65	-243.41	253.64	126.83	40°09'31.6932"N	104°35'32.1108"W	0.00	
3630.00†	19.632	26.566	3584.84	-272.24	283.70	141.85	40°09'31.9886"N	104°35'31.9133"W	0.00	
3730.00†	19.632	26.566	3679.03	-301.08	313.75	156.88	40°09'32.2840"N	104°35'31.7158"W	0.00	
3830.00†	19.632	26.566	3773.21	-329.92	343.80	171.91	40°09'32.5794"N	104°35'31.5183"W	0.00	
3930.00†	19.632	26.566	3867.40	-358.76	373.85	186.93	40°09'32.8749"N	104°35'31.3209"W	0.00	
4030.00†	19.632	26.566	3961.59	-387.59	403.90	201.96	40°09'33.1703"N	104°35'31.1234"W	0.00	
4130.00†	19.632	26.566	4055.77	-416.43	433.95	216.98	40°09'33.4657"N	104°35'30.9259"W	0.00	



Planned Wellpath Report  
Pioneer Y18-735 (REV-1.0) PWP  
Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

WELLPATH DATA (185 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4230.00†	19.632	26.566	4149.96	-445.27	464.00	232.01	40°09'33.7612"N	104°35'30.7284"W	0.00	
4330.00†	19.632	26.566	4244.15	-474.11	494.05	247.04	40°09'34.0566"N	104°35'30.5309"W	0.00	
4430.00†	19.632	26.566	4338.33	-502.94	524.10	262.06	40°09'34.3520"N	104°35'30.3334"W	0.00	
4530.00†	19.632	26.566	4432.52	-531.78	554.15	277.09	40°09'34.6474"N	104°35'30.1359"W	0.00	
4630.00†	19.632	26.566	4526.71	-560.62	584.20	292.11	40°09'34.9429"N	104°35'29.9385"W	0.00	
4730.00†	19.632	26.566	4620.90	-589.46	614.25	307.14	40°09'35.2383"N	104°35'29.7410"W	0.00	
4830.00†	19.632	26.566	4715.08	-618.30	644.30	322.17	40°09'35.5337"N	104°35'29.5435"W	0.00	
4930.00†	19.632	26.566	4809.27	-647.13	674.35	337.19	40°09'35.8291"N	104°35'29.3460"W	0.00	
5030.00†	19.632	26.566	4903.46	-675.97	704.40	352.22	40°09'36.1246"N	104°35'29.1485"W	0.00	
5130.00†	19.632	26.566	4997.64	-704.81	734.46	367.25	40°09'36.4200"N	104°35'28.9510"W	0.00	
5230.00†	19.632	26.566	5091.83	-733.65	764.51	382.27	40°09'36.7154"N	104°35'28.7535"W	0.00	
5330.00†	19.632	26.566	5186.02	-762.48	794.56	397.30	40°09'37.0108"N	104°35'28.5561"W	0.00	
5430.00†	19.632	26.566	5280.20	-791.32	824.61	412.32	40°09'37.3063"N	104°35'28.3586"W	0.00	
5530.00†	19.632	26.566	5374.39	-820.16	854.66	427.35	40°09'37.6017"N	104°35'28.1611"W	0.00	
5630.00†	19.632	26.566	5468.58	-849.00	884.71	442.38	40°09'37.8971"N	104°35'27.9636"W	0.00	
5730.00†	19.632	26.566	5562.76	-877.83	914.76	457.40	40°09'38.1925"N	104°35'27.7661"W	0.00	
5830.00†	19.632	26.566	5656.95	-906.67	944.81	472.43	40°09'38.4880"N	104°35'27.5686"W	0.00	
5930.00†	19.632	26.566	5751.14	-935.51	974.86	487.45	40°09'38.7834"N	104°35'27.3711"W	0.00	
6030.00†	19.632	26.566	5845.33	-964.35	1004.91	502.48	40°09'39.0788"N	104°35'27.1736"W	0.00	
6130.00†	19.632	26.566	5939.51	-993.18	1034.96	517.51	40°09'39.3742"N	104°35'26.9761"W	0.00	
6230.00†	19.632	26.566	6033.70	-1022.02	1065.01	532.53	40°09'39.6697"N	104°35'26.7786"W	0.00	
6330.00†	19.632	26.566	6127.89	-1050.86	1095.06	547.56	40°09'39.9651"N	104°35'26.5811"W	0.00	
6373.98	19.632	26.566	6169.31	-1063.54	1108.28	554.17	40°09'40.0950"N	104°35'26.4943"W	0.00	KOP
6430.00†	15.238	34.885	6222.75	-1077.34	1122.75	562.59	40°09'40.2371"N	104°35'26.3839"W	9.00	
6530.00†	9.171	67.767	6320.55	-1090.00	1136.57	577.51	40°09'40.3722"N	104°35'26.1898"W	9.00	
6630.00†	9.842	124.358	6419.38	-1087.11	1134.76	591.98	40°09'40.3528"N	104°35'26.0038"W	9.00	
6730.00†	16.446	152.388	6516.80	-1068.73	1117.35	605.62	40°09'40.1795"N	104°35'25.8304"W	9.00	
6830.00†	24.595	163.516	6610.41	-1035.32	1084.79	618.11	40°09'39.8564"N	104°35'25.6738"W	9.00	
6930.00†	33.168	169.249	6697.91	-987.70	1037.86	629.14	40°09'39.3916"N	104°35'25.5380"W	9.00	
7030.00†	41.904	172.817	6777.14	-927.04	977.73	638.44	40°09'38.7965"N	104°35'25.4262"W	9.00	
7130.00†	50.719	175.338	6846.15	-854.84	905.88	645.78	40°09'38.0857"N	104°35'25.3412"W	9.00	
7230.00†	59.576	177.291	6903.24	-772.87	824.07	650.97	40°09'37.2768"N	104°35'25.2851"W	9.00	
7330.00†	68.457	178.915	6947.01	-683.15	734.32	653.89	40°09'36.3896"N	104°35'25.2593"W	9.00	
7430.00†	77.352	180.351	6976.38	-587.89	638.84	654.48	40°09'35.4460"N	104°35'25.2644"W	9.00	
7530.00†	86.254	181.690	6990.63	-489.45	539.98	652.70	40°09'34.4693"N	104°35'25.3003"W	9.00	
7572.52	90.040	182.247	6992.00 <sup>1</sup>	-447.21	497.52	651.24	40°09'34.0499"N	104°35'25.3247"W	9.00	LP/TPZ
7630.00†	90.040	182.247	6991.96	-390.11	440.08	648.99	40°09'33.4825"N	104°35'25.3613"W	0.00	
7730.00†	90.040	182.247	6991.89	-290.76	340.15	645.07	40°09'32.4955"N	104°35'25.4250"W	0.00	
7772.58	90.040	182.247	6991.86 <sup>2</sup>	-248.46	297.61	643.40	40°09'32.0753"N	104°35'25.4521"W	0.00	T1
7830.00†	90.040	181.673	6991.82	-191.38	240.22	641.44	40°09'31.5084"N	104°35'25.4850"W	1.00	
7930.00†	90.040	180.673	6991.75	-91.84	140.24	639.39	40°09'30.5207"N	104°35'25.5246"W	1.00	
8030.00†	90.040	179.673	6991.68	7.85	40.24	639.09	40°09'29.5326"N	104°35'25.5417"W	1.00	
8047.41	90.040	179.499	6991.67	25.22	22.84	639.21	40°09'29.3606"N	104°35'25.5423"W	1.00	3D Arc (J)
8130.00†	90.040	179.499	6991.61	107.63	-59.75	639.94	40°09'28.5444"N	104°35'25.5439"W	0.00	
8230.00†	90.040	179.499	6991.54	207.41	-159.75	640.81	40°09'27.5562"N	104°35'25.5459"W	0.00	



Planned Wellpath Report  
Pioneer Y18-735 (REV-1.0) PWP  
Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

WELLPATH DATA (185 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8330.00†	90.040	179.499	6991.47	307.19	-259.74	641.69	40°09'26.5680"N	104°35'25.5478"W	0.00	
8430.00†	90.040	179.499	6991.40	406.97	-359.74	642.56	40°09'25.5798"N	104°35'25.5497"W	0.00	
8530.00†	90.040	179.499	6991.33	506.75	-459.74	643.44	40°09'24.5916"N	104°35'25.5517"W	0.00	
8630.00†	90.040	179.499	6991.27	606.53	-559.73	644.31	40°09'23.6034"N	104°35'25.5536"W	0.00	
8730.00†	90.040	179.499	6991.20	706.31	-659.73	645.19	40°09'22.6152"N	104°35'25.5556"W	0.00	
8830.00†	90.040	179.499	6991.13	806.09	-759.72	646.06	40°09'21.6269"N	104°35'25.5575"W	0.00	
8930.00†	90.040	179.499	6991.06	905.87	-859.72	646.94	40°09'20.6387"N	104°35'25.5594"W	0.00	
9030.00†	90.040	179.499	6990.99	1005.65	-959.72	647.81	40°09'19.6505"N	104°35'25.5614"W	0.00	
9130.00†	90.040	179.499	6990.92	1105.43	-1059.71	648.69	40°09'18.6623"N	104°35'25.5633"W	0.00	
9230.00†	90.040	179.499	6990.85	1205.21	-1159.71	649.56	40°09'17.6741"N	104°35'25.5653"W	0.00	
9330.00†	90.040	179.499	6990.78	1304.99	-1259.71	650.44	40°09'16.6859"N	104°35'25.5672"W	0.00	
9430.00†	90.040	179.499	6990.71	1404.77	-1359.70	651.31	40°09'15.6977"N	104°35'25.5691"W	0.00	
9530.00†	90.040	179.499	6990.64	1504.55	-1459.70	652.19	40°09'14.7095"N	104°35'25.5711"W	0.00	
9630.00†	90.040	179.499	6990.57	1604.33	-1559.69	653.07	40°09'13.7213"N	104°35'25.5730"W	0.00	
9730.00†	90.040	179.499	6990.50	1704.11	-1659.69	653.94	40°09'12.7331"N	104°35'25.5749"W	0.00	
9830.00†	90.040	179.499	6990.43	1803.89	-1759.69	654.82	40°09'11.7449"N	104°35'25.5769"W	0.00	
9930.00†	90.040	179.499	6990.37	1903.66	-1859.68	655.69	40°09'10.7567"N	104°35'25.5788"W	0.00	
10030.00†	90.040	179.499	6990.30	2003.44	-1959.68	656.57	40°09'9.7685"N	104°35'25.5808"W	0.00	
10130.00†	90.040	179.499	6990.23	2103.22	-2059.67	657.44	40°09'8.7803"N	104°35'25.5827"W	0.00	
10230.00†	90.040	179.499	6990.16	2203.00	-2159.67	658.32	40°09'7.7921"N	104°35'25.5846"W	0.00	
10330.00†	90.040	179.499	6990.09	2302.78	-2259.67	659.19	40°09'6.8039"N	104°35'25.5866"W	0.00	
10430.00†	90.040	179.499	6990.02	2402.56	-2359.66	660.07	40°09'5.8157"N	104°35'25.5885"W	0.00	
10530.00†	90.040	179.499	6989.95	2502.34	-2459.66	660.94	40°09'4.8275"N	104°35'25.5904"W	0.00	
10630.00†	90.040	179.499	6989.88	2602.12	-2559.66	661.82	40°09'3.8393"N	104°35'25.5924"W	0.00	
10730.00†	90.040	179.499	6989.81	2701.90	-2659.65	662.69	40°09'2.8511"N	104°35'25.5943"W	0.00	
10830.00†	90.040	179.499	6989.74	2801.68	-2759.65	663.57	40°09'1.8629"N	104°35'25.5963"W	0.00	
10930.00†	90.040	179.499	6989.67	2901.46	-2859.64	664.44	40°09'0.8747"N	104°35'25.5982"W	0.00	
11030.00†	90.040	179.499	6989.60	3001.24	-2959.64	665.32	40°08'59.8864"N	104°35'25.6001"W	0.00	
11130.00†	90.040	179.499	6989.53	3101.02	-3059.64	666.19	40°08'58.8982"N	104°35'25.6021"W	0.00	
11230.00†	90.040	179.499	6989.47	3200.80	-3159.63	667.07	40°08'57.9100"N	104°35'25.6040"W	0.00	
11330.00†	90.040	179.499	6989.40	3300.58	-3259.63	667.94	40°08'56.9218"N	104°35'25.6059"W	0.00	
11430.00†	90.040	179.499	6989.33	3400.36	-3359.62	668.82	40°08'55.9336"N	104°35'25.6079"W	0.00	
11530.00†	90.040	179.499	6989.26	3500.14	-3459.62	669.69	40°08'54.9454"N	104°35'25.6098"W	0.00	
11630.00†	90.040	179.499	6989.19	3599.92	-3559.62	670.57	40°08'53.9572"N	104°35'25.6118"W	0.00	
11730.00†	90.040	179.499	6989.12	3699.70	-3659.61	671.45	40°08'52.9690"N	104°35'25.6137"W	0.00	
11830.00†	90.040	179.499	6989.05	3799.48	-3759.61	672.32	40°08'51.9808"N	104°35'25.6156"W	0.00	
11930.00†	90.040	179.499	6988.98	3899.26	-3859.61	673.20	40°08'50.9926"N	104°35'25.6176"W	0.00	
12030.00†	90.040	179.499	6988.91	3999.04	-3959.60	674.07	40°08'50.0044"N	104°35'25.6195"W	0.00	
12130.00†	90.040	179.499	6988.84	4098.82	-4059.60	674.95	40°08'49.0162"N	104°35'25.6215"W	0.00	
12230.00†	90.040	179.499	6988.77	4198.60	-4159.59	675.82	40°08'48.0280"N	104°35'25.6234"W	0.00	
12330.00†	90.040	179.499	6988.70	4298.38	-4259.59	676.70	40°08'47.0398"N	104°35'25.6253"W	0.00	
12430.00†	90.040	179.499	6988.63	4398.15	-4359.59	677.57	40°08'46.0516"N	104°35'25.6273"W	0.00	
12530.00†	90.040	179.499	6988.57	4497.93	-4459.58	678.45	40°08'45.0634"N	104°35'25.6292"W	0.00	
12630.00†	90.040	179.499	6988.50	4597.71	-4559.58	679.32	40°08'44.0752"N	104°35'25.6311"W	0.00	
12730.00†	90.040	179.499	6988.43	4697.49	-4659.57	680.20	40°08'43.0870"N	104°35'25.6331"W	0.00	





Planned Wellpath Report  
Pioneer Y18-735 (REV-1.0) PWP  
Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

WELLPATH DATA (185 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12830.00†	90.040	179.499	6988.36	4797.27	-4759.57	681.07	40°08'42.0988"N	104°35'25.6350"W	0.00	
12930.00†	90.040	179.499	6988.29	4897.05	-4859.57	681.95	40°08'41.1105"N	104°35'25.6370"W	0.00	
13030.00†	90.040	179.499	6988.22	4996.83	-4959.56	682.82	40°08'40.1223"N	104°35'25.6389"W	0.00	
13130.00†	90.040	179.499	6988.15	5096.61	-5059.56	683.70	40°08'39.1341"N	104°35'25.6408"W	0.00	
13230.00†	90.040	179.499	6988.08	5196.39	-5159.56	684.57	40°08'38.1459"N	104°35'25.6428"W	0.00	
13330.00†	90.040	179.499	6988.01	5296.17	-5259.55	685.45	40°08'37.1577"N	104°35'25.6447"W	0.00	
13430.00†	90.040	179.499	6987.94	5395.95	-5359.55	686.32	40°08'36.1695"N	104°35'25.6466"W	0.00	
13530.00†	90.040	179.499	6987.87	5495.73	-5459.54	687.20	40°08'35.1813"N	104°35'25.6486"W	0.00	
13630.00†	90.040	179.499	6987.80	5595.51	-5559.54	688.07	40°08'34.1931"N	104°35'25.6505"W	0.00	
13730.00†	90.040	179.499	6987.73	5695.29	-5659.54	688.95	40°08'33.2049"N	104°35'25.6525"W	0.00	
13830.00†	90.040	179.499	6987.67	5795.07	-5759.53	689.82	40°08'32.2167"N	104°35'25.6544"W	0.00	
13930.00†	90.040	179.499	6987.60	5894.85	-5859.53	690.70	40°08'31.2285"N	104°35'25.6563"W	0.00	
14030.00†	90.040	179.499	6987.53	5994.63	-5959.52	691.58	40°08'30.2403"N	104°35'25.6583"W	0.00	
14130.00†	90.040	179.499	6987.46	6094.41	-6059.52	692.45	40°08'29.2521"N	104°35'25.6602"W	0.00	
14230.00†	90.040	179.499	6987.39	6194.19	-6159.52	693.33	40°08'28.2639"N	104°35'25.6621"W	0.00	
14330.00†	90.040	179.499	6987.32	6293.97	-6259.51	694.20	40°08'27.2757"N	104°35'25.6641"W	0.00	
14430.00†	90.040	179.499	6987.25	6393.75	-6359.51	695.08	40°08'26.2875"N	104°35'25.6660"W	0.00	
14530.00†	90.040	179.499	6987.18	6493.53	-6459.51	695.95	40°08'25.2993"N	104°35'25.6680"W	0.00	
14630.00†	90.040	179.499	6987.11	6593.31	-6559.50	696.83	40°08'24.3110"N	104°35'25.6699"W	0.00	
14730.00†	90.040	179.499	6987.04	6693.09	-6659.50	697.70	40°08'23.3228"N	104°35'25.6718"W	0.00	
14830.00†	90.040	179.499	6986.97	6792.86	-6759.49	698.58	40°08'22.3346"N	104°35'25.6738"W	0.00	
14930.00†	90.040	179.499	6986.90	6892.64	-6859.49	699.45	40°08'21.3464"N	104°35'25.6757"W	0.00	
15030.00†	90.040	179.499	6986.83	6992.42	-6959.49	700.33	40°08'20.3582"N	104°35'25.6776"W	0.00	
15130.00†	90.040	179.499	6986.77	7092.20	-7059.48	701.20	40°08'19.3700"N	104°35'25.6796"W	0.00	
15230.00†	90.040	179.499	6986.70	7191.98	-7159.48	702.08	40°08'18.3818"N	104°35'25.6815"W	0.00	
15330.00†	90.040	179.499	6986.63	7291.76	-7259.47	702.95	40°08'17.3936"N	104°35'25.6834"W	0.00	
15430.00†	90.040	179.499	6986.56	7391.54	-7359.47	703.83	40°08'16.4054"N	104°35'25.6854"W	0.00	
15530.00†	90.040	179.499	6986.49	7491.32	-7459.47	704.70	40°08'15.4172"N	104°35'25.6873"W	0.00	
15630.00†	90.040	179.499	6986.42	7591.10	-7559.46	705.58	40°08'14.4290"N	104°35'25.6893"W	0.00	
15730.00†	90.040	179.499	6986.35	7690.88	-7659.46	706.45	40°08'13.4408"N	104°35'25.6912"W	0.00	
15830.00†	90.040	179.499	6986.28	7790.66	-7759.46	707.33	40°08'12.4526"N	104°35'25.6931"W	0.00	
15930.00†	90.040	179.499	6986.21	7890.44	-7859.45	708.20	40°08'11.4644"N	104°35'25.6951"W	0.00	
16030.00†	90.040	179.499	6986.14	7990.22	-7959.45	709.08	40°08'10.4762"N	104°35'25.6970"W	0.00	
16130.00†	90.040	179.499	6986.07	8090.00	-8059.44	709.96	40°08'9.4879"N	104°35'25.6989"W	0.00	
16230.00†	90.040	179.499	6986.00	8189.78	-8159.44	710.83	40°08'8.4997"N	104°35'25.7009"W	0.00	
16330.00†	90.040	179.499	6985.93	8289.56	-8259.44	711.71	40°08'7.5115"N	104°35'25.7028"W	0.00	
16430.00†	90.040	179.499	6985.87	8389.34	-8359.43	712.58	40°08'6.5233"N	104°35'25.7048"W	0.00	
16530.00†	90.040	179.499	6985.80	8489.12	-8459.43	713.46	40°08'5.5351"N	104°35'25.7067"W	0.00	
16630.00†	90.040	179.499	6985.73	8588.90	-8559.42	714.33	40°08'4.5469"N	104°35'25.7086"W	0.00	
16730.00†	90.040	179.499	6985.66	8688.68	-8659.42	715.21	40°08'3.5587"N	104°35'25.7106"W	0.00	
16830.00†	90.040	179.499	6985.59	8788.46	-8759.42	716.08	40°08'2.5705"N	104°35'25.7125"W	0.00	
16930.00†	90.040	179.499	6985.52	8888.24	-8859.41	716.96	40°08'1.5823"N	104°35'25.7144"W	0.00	
17030.00†	90.040	179.499	6985.45	8988.02	-8959.41	717.83	40°08'0.5941"N	104°35'25.7164"W	0.00	
17130.00†	90.040	179.499	6985.38	9087.80	-9059.41	718.71	40°07'59.6059"N	104°35'25.7183"W	0.00	
17230.00†	90.040	179.499	6985.31	9187.58	-9159.40	719.58	40°07'58.6177"N	104°35'25.7203"W	0.00	



Planned Wellpath Report

Pioneer Y18-735 (REV-1.0) PWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

WELLPATH DATA (185 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
17330.00†	90.040	179.499	6985.24	9287.35	-9259.40	720.46	40°07'57.6295"N	104°35'25.7222"W	0.00	
17430.00†	90.040	179.499	6985.17	9387.13	-9359.39	721.33	40°07'56.6413"N	104°35'25.7241"W	0.00	
17530.00†	90.040	179.499	6985.10	9486.91	-9459.39	722.21	40°07'55.6530"N	104°35'25.7261"W	0.00	
17630.00†	90.040	179.499	6985.03	9586.69	-9559.39	723.08	40°07'54.6648"N	104°35'25.7280"W	0.00	
17679.60	90.040	179.499	6985.00‡	9636.18	-9608.98	723.52	40°07'54.1747"N	104°35'25.7290"W	0.00	BHL

HOLE & CASING SECTIONS - Ref Wellbore: Pioneer Y18-735 PWB    Ref Wellpath: Pioneer Y18-735 (REV-1.0) 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
PIONEER Y18-785 SECTION 18	N/A	0.00	-23.20	-808.73	3252776.45	1301717.15	40°09'29.0520"N	104°35'44.1960"W	polygon
	2D Polygon: dimensions not calculated								
PIONEER Y18-785 SECTION 7	N/A	0.00	-23.20	-808.73	3252776.45	1301717.15	40°09'29.0520"N	104°35'44.1960"W	polygon
	2D Polygon: dimensions not calculated								
3) PIONEER Y18-735 BHL PLAN (200'FSL & 1604'FEL,SEC.18)	17679.60	6985.00	-9608.98	723.52	3254308.63	1292131.79	40°07'54.1747"N	104°35'25.7290"W	point
2) PIONEER Y18-735 T1	7772.58	6991.86	297.61	643.40	3254228.52	1302037.95	40°09'32.0753"N	104°35'25.4521"W	point
1) PIONEER Y18-735 LP PLAN (200'FNL & 1592'FEL,SEC.07)	7572.52	6992.00	497.52	651.24	3254236.36	1302237.85	40°09'34.0499"N	104°35'25.3247"W	point

SURVEY PROGRAM - Ref Wellbore: Pioneer Y18-735 PWB    Ref Wellpath: Pioneer Y18-735 (REV-1.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1950.00	Gyrodata 2015 - GC+DROP+COND		Pioneer Y18-735 PWB
1950.00	17689.97	OWSG MWD rev2 (MS+IFR1)		Pioneer Y18-735 PWB



Planned Wellpath Report  
Pioneer Y18-735 (REV-1.0) PWP  
Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	26.566	30.00	SHL
2200.00	0.000	26.566	2200.00	End of Tangent
3181.61	19.632	26.566	3162.51	Build (XS)
6373.98	19.632	26.566	6169.31	KOP
7572.52	90.040	182.247	6992.00	LP/TPZ
7772.58	90.040	182.247	6991.86	T1
8047.41	90.040	179.499	6991.67	3D Arc (J)
17679.60	90.040	179.499	6985.00	BHL





Closest Approach Clearance Summary Report

Pioneer Y18-735 (REV-1.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 1 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

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	0.999958	Report Generated	5/23/2022 at 7:43:44 AM
Convergence at slot	0.59° 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	20.75	926.15	3253585.15	1301740.35	40°09'29.1996"N	104°35'33.7776"W
Facility Reference Pt			3252659.03	1301719.60	40°09'29.0880"N	104°35'45.7080"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.3150"N	105°30'0.0000"W

WELLPATH DATUM			
Calculation method	Minimum Curvature	(4885'GL+30'KB@4915'RKB) (RKB) to Facility Vertical Datum	4915.00ft
Horizontal Reference Pt	Slot	(4885'GL+30'KB@4915'RKB) (RKB) to Mean Sea Level	4915.00ft
Vertical Reference Pt	(4885'GL+30'KB@4915'RKB) (RKB)	(4885'GL+30'KB@4915'RKB) (RKB) to Mud Line at Slot (SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07))	4915.00ft
MD Reference Pt	(4885'GL+30'KB@4915'RKB) (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	7.73° East of TN	Dip Angle	66.45°	Mag Field Strength	51798 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

Pioneer Y18-735 (REV-1.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 2 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

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: Pioneer Y18-735 PWB    Ref Wellpath: Pioneer Y18-735 (REV-1.0) 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: Pioneer Y18-735 PWB    Ref Wellpath: Pioneer Y18-735 (REV-1.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1950.00	Gyrodata 2015 - GC+DROP+COND		Pioneer Y18-735 PWB
1950.00	17689.97	OWSG MWD rev2 (MS+IFR1)		Pioneer Y18-735 PWB



Closest Approach Clearance Summary Report

Pioneer Y18-735 (REV-1.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 3 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17679.60ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (32 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.07-T02N-R64W	SLOT#28 UPRC 7-10Q (PR)	UPRC 7-10Q (PR)	UPRC 7-10Q (PR) AWB	UPRC 7-10Q (PR) AWP	Drilling	11224.28	10.89	11224.28	11224.62	0.10	11224.62	FAIL
Y Section 18	(HSR Harkis 15-18 (PR))	HSR Harkis 15-18 (PR)	Wellbore #1	Wellbore #1\As-Drilled	Drilling	16557.90	116.41	16557.90	16533.61	0.55	16533.61	FAIL
SEC.07-T02N-R64W	SLOT#20 PIONEER Y18-730 (703'FNL & 2239'FEL,SEC.07)	Pioneer Y18-730	Pioneer Y18-730 PWB	PIONEER Y18-730 (REV-1.0) PWP	Planned	30.00	22.22	2200.00	2370.54	0.94	17679.60	FAIL
SEC.07-T02N-R64W	SLOT#22 PIONEER Y18-744 (658'FNL & 2240'FEL,SEC.07)	Pioneer Y18-744	Pioneer Y18-744 PWB	Pioneer Y18-744 (REV-1.0) PWP	Planned	2396.61	21.54	8047.41	2409.41	0.96	17679.60	FAIL
SEC.07-T02N-R64W	SLOT#06 PIONEER D31-735 (706'FNL & 2219'FEL, SEC.07)	PIONEER D31-735	PIONEER D31-735 AWB	PIONEER D31-735 AWP	Drilling	7409.50	83.22	7409.50	7411.69	1.61	7411.69	PASS
SEC.07-T02N-R64W	SLOT#19 PIONEER Y18-725 (726'FNL & 2239'FEL,SEC.07)	PIONEER Y18-725	PIONEER Y18-725 PWB	PIONEER Y18-725 (REV-1.0) PWP	Planned	2459.41	36.77	8130.00	2477.81	1.79	17679.60	PASS
Y Section 18	(Lyle V Cooksey Gas Unit 1 (PR))	Lyle V Cooksey Gas Unit 1 (PR)	Wellbore #1	Wellbore #1\Gyro Surveys	Drilling	14339.61	540.62	14339.61	14510.66	2.59	14510.66	PASS
SEC.07-T02N-R64W	SLOT#18 PIONEER Y18-715 (748'FNL & 2239'FEL,SEC.07)	Pioneer Y18-715	Pioneer Y18-715 PWB	PIONEER Y18-715 (REV-1.0) PWP	Planned	30.00	67.40	2200.00	2254.02	3.30	17679.60	PASS
SEC.07-T02N-R64W	SLOT#05 PIONEER D31-744 (706'FNL & 2142'FEL, SEC.07)	PIONEER D31-744	PIONEER D31-744 AWB	PIONEER D31-744 AWP	Drilling	2577.36	89.93	7630.00	2643.73	4.77	7330.00	PASS
SEC.07-T02N-R64W	SLOT#23 PIONEER Y18-756 (639'FNL & 2089'FWL,SEC.07)	Pioneer Y18-756	Pioneer Y18-756 PWB	PIONEER Y18-756 (REV-1.0) PWP	Planned	2240.03	762.58	8030.00	17679.60	5.90	17679.60	PASS
SEC.07-T02N-R64W	SLOT#13 Perkins 31-7 (SI)	Perkins 31-7 (SI)	Perkins 31-7 (SI) AWB	Perkins 31-7 (SI) AWP	Drilling	3184.96	223.72	7999.31	7999.31	6.57	7999.31	PASS
SEC.07-T02N-R64W	SLOT#17 Pioneer Y07-07D (PA)	Pioneer Y07-07D (PA)	Pioneer Y07-07D (PA) AWB	Pioneer Y07-07D (PA) AWP	Drilling	9236.84	383.30	9236.84	9255.71	7.28	9255.71	PASS
SEC.07-T02N-R64W	SLOT#14 Perkins USX Y 7-17 (SI)	Perkins USX Y 7-17 (SI)	Perkins USX Y 7-17 (SI) AWB	Perkins USX Y 7-17 (SI) AWP	Drilling	8646.29	335.78	8646.29	8670.49	7.35	8670.49	PASS
SEC.07-T02N-R64W	SLOT#07 PIONEER D31-725 (707'FNL & 2097'FEL, SEC.07)	PIONEER D31-725	PIONEER D31-725 AWB	PIONEER D31-725 AWP	Drilling	2190.95	134.64	7630.00	2238.46	7.48	7630.00	PASS
SEC.07-T02N-R64W	SLOT#12 HP Y07-10D (PA)	HP Y07-10D (PA)	HP Y07-10D (PA) AWB	HP Y07-10D (PA) AWP	Drilling	10554.10	509.43	10554.10	10561.05	8.00	10561.05	PASS
SEC.07-T02N-R64W	SLOT#10 HP Farms Y 7-15JI (PR)	HP Farms Y 7-15JI (PR)	HP Farms Y 7-15JI (PR) AWB	HP Farms Y 7-15JI (PR) AWP	Drilling	11963.71	682.22	11963.71	11986.65	8.85	11986.65	PASS
SEC.07-T02N-R64W	SLOT#24 PIONEER Y18-766 (661'FNL & 2088'FWL,SEC.07)	Pioneer Y18-766	Pioneer Y18-766 PWB	Pioneer Y18-766 (REV-1.0) PWP	Planned	30.00	762.29	8030.00	17679.60	8.86	17679.60	PASS
SEC.07-T02N-R64W	SLOT#04 PIONEER D31-716 (707'FNL & 2074'FEL, SEC.07)	PIONEER D31-716	PIONEER D31-716 AWB	PIONEER D31-716 AWP	Drilling	2004.85	162.14	7730.00	2212.25	9.04	7630.00	PASS
SEC.07-T02N-R64W	SLOT#16 Pioneer USX Y07-08D (PR)	Pioneer USX Y07-08D (PR)	Pioneer USX Y07-08D (PR) AWB	Pioneer USX Y07-08D (PR) AWP	Drilling	9433.96	913.08	9433.96	9485.66	10.20	9485.66	PASS
SEC.07-T02N-R64W	SLOT#25 PIONEER Y18-770 (684'FNL & 2088'FWL,SEC.07)	PIONEER Y18-770	PIONEER Y18-770 PWB	PIONEER Y18-770 (REV-1.0) PWP	Planned	30.00	762.65	8030.00	17679.60	10.56	17679.60	PASS
SEC.07-T02N-R64W	SLOT#26 PIONEER Y18-775 (706'FNL & 2088'FWL,SEC.07)	Pioneer Y18-775	Pioneer Y18-775 PWB	PIONEER Y18-775 (REV-1.0) PWP	Planned	30.00	763.69	8030.00	17679.60	11.83	17679.60	PASS
Y Section 18	(Charles R Milliken Unit 1 (PR))	Charles R Milliken Unit 1 (PR)	Wellbore #1	Wellbore #1\Gyro Surveys	Drilling	16413.75	2491.89	16413.75	17100.45	12.57	17100.45	PASS
SEC.07-T02N-R64W	SLOT#27 PIONEER Y18-785 (729'FNL & 2088'FWL,SEC.07)	Pioneer Y18-785	Pioneer Y18-785 PWB	PIONEER Y18-785 (REV-1.0) PWP_AC	Planned	30.00	765.36	2200.00	17679.60	14.80	17679.60	PASS
SEC.07-T02N-R64W	SLOT#11 HP Y07-09 (PR)	HP Y07-09 (PR)	HP Y07-09 (PR) AWB	HP Y07-09 (PR) AWP	Drilling	10644.52	1006.97	10644.52	10795.77	16.08	10795.77	PASS
Y Section 18	(ADA Harkins Unit A1 (PA))	ADA Harkins Unit A1 (PA)	Wellbore #1	Wellbore #1\Gyro Surveys	Drilling	13944.05	2309.32	13944.05	14082.12	19.00	14082.12	PASS



Closest Approach Clearance Summary Report

Pioneer Y18-735 (REV-1.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 4 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	Pioneer Y18-735
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T02N-R64W	Wellbore	Pioneer Y18-735 PWB
Slot	SLOT#21 PIONEER Y18-735 (681'FNL & 2240'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17679.60ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (32 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.07-T02N-R64W	SLOT#15 Pioneer 22-7 (SI)	Pioneer 22-7 (SI)	Pioneer 22-7 (SI) AWB	Pioneer 22-7 (SI) AWP	Drilling	9568.75	1454.30	9568.75	9751.60	27.46	9751.60	PASS
SEC.07-T02N-R64W	SLOT#03 PIONEER D31-756 (681'FNL & 1991'FWL,SEC.07)	PIONEER D31-756	PIONEER D31-756 AWB	PIONEER D31-756 AWP	Drilling	2207.46	857.93	7630.00	7099.42	29.16	7099.42	PASS
SEC.07-T02N-R64W	SLOT#29 UPRR 53 PAN AM E 1 (PA)	UPRR 53 PAN AM E 1 (PA)	UPRR 53 PAN AM E 1 (PA) AWB	UPRR 53 PAN AM E 1 (PA) AWP	Drilling	11310.86	2437.39	11310.86	11842.72	33.72	11842.72	PASS
SEC.07-T02N-R64W	SLOT#02 PIONEER D31-775 (680'FNL & 1946'FWL, SEC.07)	PIONEER D31-775	PIONEER D31-775 AWB	PIONEER D31-775 AWP	Drilling	1988.31	897.12	7830.00	6996.35	45.53	7830.00	PASS
SEC.07-T02N-R64W	SLOT#08 Harkis 1-7 (PA)	Harkis 1-7 (PA)	Harkis 1-7 (PA) AWB	Harkis 1-7 (PA) AWP	Drilling	1146.08	1998.60	8830.00	9450.73	51.69	9450.73	PASS
SEC.07-T02N-R64W	SLOT#01 PIONEER D31-785 (680'FNL & 1923'FWL, SEC.07)	PIONEER D31-785	PIONEER D31-785 AWB	PIONEER D31-785 AWP	Drilling	30.00	926.41	7930.00	2287.14	52.12	8530.00	PASS
SEC.07-T02N-R64W	SLOT#09 Harkis 11-7 (PA)	Harkis 11-7 (PA)	Harkis 11-7 (PA) AWB	Harkis 11-7 (PA) AWP	Drilling	2018.77	2207.88	8047.41	8773.43	64.86	8773.43	PASS