NOBLE ENERGY, INC

Location:	COLORADO	Slot:	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	BISHOP A06-722
Facility:	SEC.07-T06N-R64W	Wellbore:	BISHOP A06-722 PWB

Plot reference wellpath is BISHOP A06-722 (REV-C.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (4744'GL+30'KB@4774'RKB) (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to RIG (4744'GL+30'KB@4774'RKB) (RKB)	Scale: True distance
RIG (4744'GL+30'KB@4774'RKB) (RKB) to Mean Sea Level: 4774 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: martsam01 on 2023-10-06; Database: WA_Denver

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.07-T06N-R64W			3254380.716	1428262.611	40°30'19.3680"N	104°35'6.7200"W
Slot	**Local N (ft)**	**Local E (ft)**	**Grid East (US ft)**	**Grid North (US ft)**	**Latitude**	**Longitude**
SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)	-149.64	-61.03	3254319.689	1428112.973	40°30'17.8956"N	104°35'7.5300"W

RIG (4744'GL+30'KB@4774'RKB) (RKB) to Ground level (At Slot: SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07))	4774ft
Mean Sea Level to Ground level (At Slot: SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07))	0ft
RIG (4744'GL+30'KB@4774'RKB) (RKB) to Mean Sea Level	4774ft

Well Profile Data

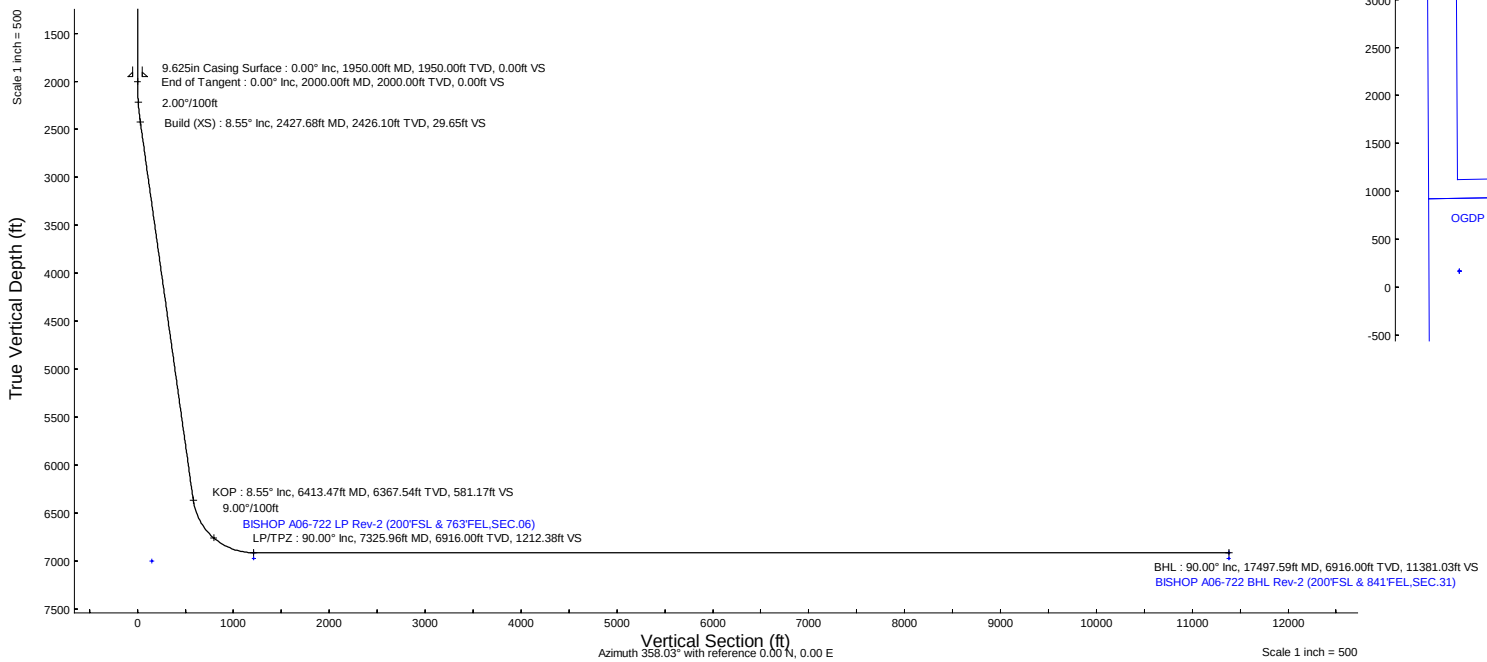
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
SHL	30.00	0.000	336.512	30.00	0.00	0.00	0.00	0.00
End of Tangent	2000.00	0.000	336.512	2000.00	0.00	0.00	0.00	0.00
Build (XS)	2427.68	8.554	336.512	2426.10	29.23	-12.70	2.00	29.65
KOP	6413.47	8.554	336.512	6367.54	572.94	-248.97	0.00	581.17
LP/TPZ	7325.96	90.000	359.412	6916.00	1203.19	-287.54	9.00	1212.38
BHL	17497.59	90.000	359.412	6916.00	11374.28	-391.91	0.00	11381.03

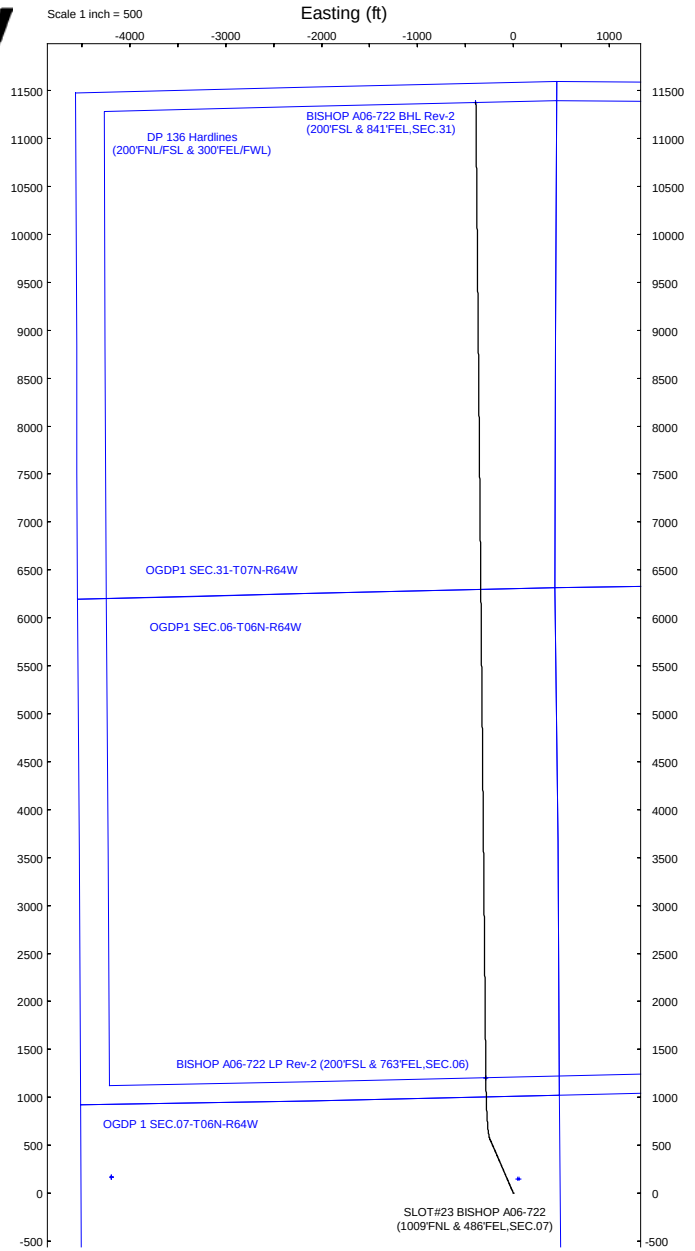
Targets

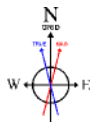
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
OGDP 1 SEC.07-T06N-R64W	N/A	2.00	149.64	61.03	3254380.72	1428262.61	40°30'19.3680"N	104°35'6.7200"W
OGDP1 SEC.05-T06N-R64W	N/A	20.00	168.08	-4191.33	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
OGDP1 SEC.06-T06N-R64W	N/A	20.00	168.08	-4191.33	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
OGDP1 SEC.31-T07N-R64W	N/A	20.00	168.08	-4191.33	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
OGDP1 SEC.32-T07N-R64W	N/A	20.00	168.08	-4191.33	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
BISHOP A06-722 BHL Rev-2 (200'FSL & 841'FEL,SEC.31)	17497.59	6916.00	11374.28	-391.91	3253927.79	1439486.85	40°32'10.3236"N	104°35'11.0862"W
BISHOP A06-722 LP Rev-2 (200'FSL & 763'FEL,SEC.06)	7325.96	6916.00	1203.19	-287.54	3254032.16	1429316.12	40°30'29.8135"N	104°35'11.0917"W
BISHOP A06-722 BHL Rev-1 (200'FSL & 841'FEL,SEC.31)	N/A	6974.00	11374.28	-391.91	3253927.79	1439486.85	40°32'10.3236"N	104°35'11.0862"W
BISHOP A06-722 LP Rev-1 (200'FSL & 763'FEL,SEC.06)	N/A	6974.00	1203.19	-287.54	3254032.16	1429316.12	40°30'29.8135"N	104°35'11.0917"W
DP 136 Hardlines (200'FNL/FSL & 300'FEL/FWL)	N/A	7003.00	149.84	44.90	3254364.58	1428262.81	40°30'19.3716"N	104°35'6.9288"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)		BISHOP A06-722 PWB
1950.00	17497.59	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-722 PWB







BGGM (1900.0 to 2024.0) Dip: 66.68° Field: 51663.2 nT
Magnetic North is 7.38 degrees East of True North (at 10/4/2023)
Grid North is 0.59 degrees East of True North
To correct azimuth from True to Grid subtract 0.59 degrees
To correct azimuth from Magnetic to Grid add 6.79 degrees

Planned Wellpath Report

BISHOP A06-722 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-722**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-722 PWB**
Slot	**SLOT#23 BISHOP A06-722 (1009'FNL & 486'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	**Martsam01**
Scale	**0.999967**	Report Generated	**10/6/2023** at **11:27:10 AM**
Convergence at slot	**0.59° 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	-149.64	-61.03	3254319.69	1428112.97	**40.5049710°**	**-104.5854250°**
Facility Reference Pt			3254380.72	1428262.61	**40.5053800°**	**-104.5852000°**
Field Reference Pt			**3000000.00**	**4454105.15**	48.7761986°	-105.5000000°

WELLPATH DATUM			
Calculation method	**Minimum curvature**	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Facility Vertical Datum	**4774.00ft**
Horizontal Reference Pt	**Slot**	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Mean Sea Level	**4774.00ft**
Vertical Reference Pt	**RIG (4744'GL+30'KB@4774'RKB) (RKB)**	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Ground Level at Slot (SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07))	**4774.00ft**
MD Reference Pt	**RIG (4744'GL+30'KB@4774'RKB) (RKB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**358.03°**

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-722
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-722 PWB
Slot	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)		

WELLPATH DATA (181 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	336.512	0.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
30.00	0.000	336.512	30.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	SHL
130.00†	0.000	336.512	130.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
230.00†	0.000	336.512	230.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
330.00†	0.000	336.512	330.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
430.00†	0.000	336.512	430.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
530.00†	0.000	336.512	530.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
630.00†	0.000	336.512	630.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
730.00†	0.000	336.512	730.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
830.00†	0.000	336.512	830.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
930.00†	0.000	336.512	930.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1030.00†	0.000	336.512	1030.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1130.00†	0.000	336.512	1130.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1230.00†	0.000	336.512	1230.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1330.00†	0.000	336.512	1330.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1430.00†	0.000	336.512	1430.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1530.00†	0.000	336.512	1530.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1630.00†	0.000	336.512	1630.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1730.00†	0.000	336.512	1730.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1830.00†	0.000	336.512	1830.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
1930.00†	0.000	336.512	1930.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	
2000.00	0.000	336.512	2000.00	0.00	0.00	0.00	40.5049710	-104.5854250	0.00	End of Tangent
2030.00†	0.600	336.512	2030.00	0.15	0.14	-0.06	40.5049714	-104.5854252	2.00	
2130.00†	2.600	336.512	2129.96	2.74	2.70	-1.18	40.5049785	-104.5854291	2.00	
2230.00†	4.600	336.512	2229.75	8.58	8.46	-3.68	40.5049943	-104.5854379	2.00	
2330.00†	6.600	336.512	2329.27	17.66	17.41	-7.57	40.5050190	-104.5854516	2.00	
2427.68	8.554	336.512	2426.10	29.65	29.23	-12.70	40.5050516	-104.5854696	2.00	Build (XS)
2430.00†	8.554	336.512	2428.39	29.97	29.54	-12.84	40.5050524	-104.5854701	0.00	
2530.00†	8.554	336.512	2527.28	43.80	43.18	-18.77	40.5050901	-104.5854909	0.00	
2630.00†	8.554	336.512	2626.16	57.64	56.82	-24.69	40.5051277	-104.5855117	0.00	
2730.00†	8.554	336.512	2725.05	71.48	70.46	-30.62	40.5051653	-104.5855325	0.00	
2830.00†	8.554	336.512	2823.94	85.31	84.11	-36.55	40.5052029	-104.5855533	0.00	
2930.00†	8.554	336.512	2922.83	99.15	97.75	-42.48	40.5052405	-104.5855741	0.00	
3030.00†	8.554	336.512	3021.71	112.99	111.39	-48.40	40.5052781	-104.5855949	0.00	
3130.00†	8.554	336.512	3120.60	126.83	125.03	-54.33	40.5053157	-104.5856157	0.00	
3230.00†	8.554	336.512	3219.49	140.66	138.67	-60.26	40.5053533	-104.5856365	0.00	
3330.00†	8.554	336.512	3318.38	154.50	152.31	-66.19	40.5053909	-104.5856574	0.00	
3430.00†	8.554	336.512	3417.26	168.34	165.95	-72.12	40.5054285	-104.5856782	0.00	
3530.00†	8.554	336.512	3516.15	182.18	179.59	-78.04	40.5054661	-104.5856990	0.00	
3630.00†	8.554	336.512	3615.04	196.01	193.24	-83.97	40.5055038	-104.5857198	0.00	
3730.00†	8.554	336.512	3713.93	209.85	206.88	-89.90	40.5055414	-104.5857406	0.00	
3830.00†	8.554	336.512	3812.82	223.69	220.52	-95.83	40.5055790	-104.5857614	0.00	
3930.00†	8.554	336.512	3911.70	237.52	234.16	-101.76	40.5056166	-104.5857822	0.00	
4030.00†	8.554	336.512	4010.59	251.36	247.80	-107.68	40.5056542	-104.5858030	0.00	
4130.00†	8.554	336.512	4109.48	265.20	261.44	-113.61	40.5056918	-104.5858238	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-722
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-722 PWB
Slot	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)		

WELLPATH DATA (181 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4230.00†	8.554	336.512	4208.37	279.04	275.08	-119.54	40.5057294	-104.5858446	0.00	
4330.00†	8.554	336.512	4307.25	292.87	288.72	-125.47	40.5057670	-104.5858655	0.00	
4430.00†	8.554	336.512	4406.14	306.71	302.37	-131.40	40.5058046	-104.5858863	0.00	
4530.00†	8.554	336.512	4505.03	320.55	316.01	-137.32	40.5058422	-104.5859071	0.00	
4630.00†	8.554	336.512	4603.92	334.39	329.65	-143.25	40.5058798	-104.5859279	0.00	
4730.00†	8.554	336.512	4702.80	348.22	343.29	-149.18	40.5059175	-104.5859487	0.00	
4830.00†	8.554	336.512	4801.69	362.06	356.93	-155.11	40.5059551	-104.5859695	0.00	
4930.00†	8.554	336.512	4900.58	375.90	370.57	-161.03	40.5059927	-104.5859903	0.00	
5030.00†	8.554	336.512	4999.47	389.73	384.21	-166.96	40.5060303	-104.5860111	0.00	
5130.00†	8.554	336.512	5098.36	403.57	397.85	-172.89	40.5060679	-104.5860319	0.00	
5230.00†	8.554	336.512	5197.24	417.41	411.50	-178.82	40.5061055	-104.5860527	0.00	
5330.00†	8.554	336.512	5296.13	431.25	425.14	-184.75	40.5061431	-104.5860736	0.00	
5430.00†	8.554	336.512	5395.02	445.08	438.78	-190.67	40.5061807	-104.5860944	0.00	
5530.00†	8.554	336.512	5493.91	458.92	452.42	-196.60	40.5062183	-104.5861152	0.00	
5630.00†	8.554	336.512	5592.79	472.76	466.06	-202.53	40.5062559	-104.5861360	0.00	
5730.00†	8.554	336.512	5691.68	486.60	479.70	-208.46	40.5062935	-104.5861568	0.00	
5830.00†	8.554	336.512	5790.57	500.43	493.34	-214.39	40.5063311	-104.5861776	0.00	
5930.00†	8.554	336.512	5889.46	514.27	506.98	-220.31	40.5063688	-104.5861984	0.00	
6030.00†	8.554	336.512	5988.34	528.11	520.63	-226.24	40.5064064	-104.5862192	0.00	
6130.00†	8.554	336.512	6087.23	541.95	534.27	-232.17	40.5064440	-104.5862400	0.00	
6230.00†	8.554	336.512	6186.12	555.78	547.91	-238.10	40.5064816	-104.5862608	0.00	
6330.00†	8.554	336.512	6285.01	569.62	561.55	-244.03	40.5065192	-104.5862817	0.00	
6413.47	8.554	336.512	6367.54	581.17	572.94	-248.97	40.5065506	-104.5862990	0.00	KOP
6430.00†	9.939	339.901	6383.86	583.67	575.40	-249.95	40.5065574	-104.5863025	9.00	
6530.00†	18.656	349.429	6480.69	607.74	599.28	-255.87	40.5066231	-104.5863228	9.00	
6630.00†	27.552	352.971	6572.58	646.67	638.04	-261.64	40.5067296	-104.5863422	9.00	
6730.00†	36.496	354.875	6657.28	699.51	690.72	-267.14	40.5068744	-104.5863600	9.00	
6830.00†	45.460	356.110	6732.70	764.95	756.03	-272.22	40.5070538	-104.5863759	9.00	
6930.00†	54.433	357.014	6796.98	841.39	832.36	-276.77	40.5072634	-104.5863894	9.00	
7030.00†	63.412	357.734	6848.55	926.95	917.83	-280.67	40.5074981	-104.5864002	9.00	
7130.00†	72.394	358.348	6886.13	1019.51	1010.33	-283.81	40.5077521	-104.5864081	9.00	
7230.00†	81.378	358.904	6908.79	1116.79	1107.60	-286.14	40.5080191	-104.5864129	9.00	
7325.96	90.000	359.412	6916.00[1]	1212.38	1203.19	-287.54	40.5082815	-104.5864144	9.00	LP/TPZ
7330.00†	90.000	359.412	6916.00	1216.41	1207.22	-287.58	40.5082926	-104.5864144	0.00	
7430.00†	90.000	359.412	6916.00	1316.38	1307.22	-288.61	40.5085671	-104.5864143	0.00	
7530.00†	90.000	359.412	6916.00	1416.35	1407.21	-289.64	40.5088416	-104.5864143	0.00	
7630.00†	90.000	359.412	6916.00	1516.32	1507.21	-290.66	40.5091161	-104.5864143	0.00	
7730.00†	90.000	359.412	6916.00	1616.29	1607.20	-291.69	40.5093905	-104.5864143	0.00	
7830.00†	90.000	359.412	6916.00	1716.26	1707.20	-292.71	40.5096650	-104.5864143	0.00	
7930.00†	90.000	359.412	6916.00	1816.24	1807.19	-293.74	40.5099395	-104.5864143	0.00	
8030.00†	90.000	359.412	6916.00	1916.21	1907.19	-294.77	40.5102140	-104.5864143	0.00	
8130.00†	90.000	359.412	6916.00	2016.18	2007.18	-295.79	40.5104885	-104.5864142	0.00	
8230.00†	90.000	359.412	6916.00	2116.15	2107.18	-296.82	40.5107630	-104.5864142	0.00	
8330.00†	90.000	359.412	6916.00	2216.12	2207.17	-297.84	40.5110375	-104.5864142	0.00	
8430.00†	90.000	359.412	6916.00	2316.09	2307.17	-298.87	40.5113119	-104.5864142	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-722
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-722 PWB
Slot	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)		

WELLPATH DATA (181 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8530.00†	90.000	359.412	6916.00	2416.06	2407.16	-299.90	40.5115864	-104.5864142	0.00	
8630.00†	90.000	359.412	6916.00	2516.03	2507.16	-300.92	40.5118609	-104.5864142	0.00	
8730.00†	90.000	359.412	6916.00	2616.00	2607.15	-301.95	40.5121354	-104.5864142	0.00	
8830.00†	90.000	359.412	6916.00	2715.97	2707.15	-302.97	40.5124099	-104.5864141	0.00	
8930.00†	90.000	359.412	6916.00	2815.94	2807.14	-304.00	40.5126844	-104.5864141	0.00	
9030.00†	90.000	359.412	6916.00	2915.91	2907.13	-305.03	40.5129588	-104.5864141	0.00	
9130.00†	90.000	359.412	6916.00	3015.88	3007.13	-306.05	40.5132333	-104.5864141	0.00	
9230.00†	90.000	359.412	6916.00	3115.86	3107.12	-307.08	40.5135078	-104.5864141	0.00	
9330.00†	90.000	359.412	6916.00	3215.83	3207.12	-308.11	40.5137823	-104.5864141	0.00	
9430.00†	90.000	359.412	6916.00	3315.80	3307.11	-309.13	40.5140568	-104.5864140	0.00	
9530.00†	90.000	359.412	6916.00	3415.77	3407.11	-310.16	40.5143313	-104.5864140	0.00	
9630.00†	90.000	359.412	6916.00	3515.74	3507.10	-311.18	40.5146058	-104.5864140	0.00	
9730.00†	90.000	359.412	6916.00	3615.71	3607.10	-312.21	40.5148802	-104.5864140	0.00	
9830.00†	90.000	359.412	6916.00	3715.68	3707.09	-313.24	40.5151547	-104.5864140	0.00	
9930.00†	90.000	359.412	6916.00	3815.65	3807.09	-314.26	40.5154292	-104.5864140	0.00	
10030.00†	90.000	359.412	6916.00	3915.62	3907.08	-315.29	40.5157037	-104.5864140	0.00	
10130.00†	90.000	359.412	6916.00	4015.59	4007.08	-316.31	40.5159782	-104.5864139	0.00	
10230.00†	90.000	359.412	6916.00	4115.56	4107.07	-317.34	40.5162527	-104.5864139	0.00	
10330.00†	90.000	359.412	6916.00	4215.53	4207.07	-318.37	40.5165271	-104.5864139	0.00	
10430.00†	90.000	359.412	6916.00	4315.50	4307.06	-319.39	40.5168016	-104.5864139	0.00	
10530.00†	90.000	359.412	6916.00	4415.48	4407.06	-320.42	40.5170761	-104.5864139	0.00	
10630.00†	90.000	359.412	6916.00	4515.45	4507.05	-321.44	40.5173506	-104.5864139	0.00	
10730.00†	90.000	359.412	6916.00	4615.42	4607.05	-322.47	40.5176251	-104.5864139	0.00	
10830.00†	90.000	359.412	6916.00	4715.39	4707.04	-323.50	40.5178996	-104.5864138	0.00	
10930.00†	90.000	359.412	6916.00	4815.36	4807.03	-324.52	40.5181740	-104.5864138	0.00	
11030.00†	90.000	359.412	6916.00	4915.33	4907.03	-325.55	40.5184485	-104.5864138	0.00	
11130.00†	90.000	359.412	6916.00	5015.30	5007.02	-326.57	40.5187230	-104.5864138	0.00	
11230.00†	90.000	359.412	6916.00	5115.27	5107.02	-327.60	40.5189975	-104.5864138	0.00	
11330.00†	90.000	359.412	6916.00	5215.24	5207.01	-328.63	40.5192720	-104.5864138	0.00	
11430.00†	90.000	359.412	6916.00	5315.21	5307.01	-329.65	40.5195465	-104.5864137	0.00	
11530.00†	90.000	359.412	6916.00	5415.18	5407.00	-330.68	40.5198209	-104.5864137	0.00	
11630.00†	90.000	359.412	6916.00	5515.15	5507.00	-331.71	40.5200954	-104.5864137	0.00	
11730.00†	90.000	359.412	6916.00	5615.12	5606.99	-332.73	40.5203699	-104.5864137	0.00	
11830.00†	90.000	359.412	6916.00	5715.10	5706.99	-333.76	40.5206444	-104.5864137	0.00	
11930.00†	90.000	359.412	6916.00	5815.07	5806.98	-334.78	40.5209189	-104.5864137	0.00	
12030.00†	90.000	359.412	6916.00	5915.04	5906.98	-335.81	40.5211934	-104.5864137	0.00	
12130.00†	90.000	359.412	6916.00	6015.01	6006.97	-336.84	40.5214679	-104.5864136	0.00	
12230.00†	90.000	359.412	6916.00	6114.98	6106.97	-337.86	40.5217423	-104.5864136	0.00	
12330.00†	90.000	359.412	6916.00	6214.95	6206.96	-338.89	40.5220168	-104.5864136	0.00	
12430.00†	90.000	359.412	6916.00	6314.92	6306.96	-339.91	40.5222913	-104.5864136	0.00	
12530.00†	90.000	359.412	6916.00	6414.89	6406.95	-340.94	40.5225658	-104.5864136	0.00	
12630.00†	90.000	359.412	6916.00	6514.86	6506.95	-341.97	40.5228403	-104.5864136	0.00	
12730.00†	90.000	359.412	6916.00	6614.83	6606.94	-342.99	40.5231148	-104.5864136	0.00	
12830.00†	90.000	359.412	6916.00	6714.80	6706.93	-344.02	40.5233892	-104.5864135	0.00	
12930.00†	90.000	359.412	6916.00	6814.77	6806.93	-345.04	40.5236637	-104.5864135	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-722
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-722 PWB
Slot	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)		

WELLPATH DATA (181 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13030.00†	90.000	359.412	6916.00	6914.74	6906.92	-346.07	40.5239382	-104.5864135	0.00	
13130.00†	90.000	359.412	6916.00	7014.72	7006.92	-347.10	40.5242127	-104.5864135	0.00	
13230.00†	90.000	359.412	6916.00	7114.69	7106.91	-348.12	40.5244872	-104.5864135	0.00	
13330.00†	90.000	359.412	6916.00	7214.66	7206.91	-349.15	40.5247617	-104.5864135	0.00	
13430.00†	90.000	359.412	6916.00	7314.63	7306.90	-350.17	40.5250361	-104.5864134	0.00	
13530.00†	90.000	359.412	6916.00	7414.60	7406.90	-351.20	40.5253106	-104.5864134	0.00	
13630.00†	90.000	359.412	6916.00	7514.57	7506.89	-352.23	40.5255851	-104.5864134	0.00	
13730.00†	90.000	359.412	6916.00	7614.54	7606.89	-353.25	40.5258596	-104.5864134	0.00	
13830.00†	90.000	359.412	6916.00	7714.51	7706.88	-354.28	40.5261341	-104.5864134	0.00	
13930.00†	90.000	359.412	6916.00	7814.48	7806.88	-355.31	40.5264086	-104.5864134	0.00	
14030.00†	90.000	359.412	6916.00	7914.45	7906.87	-356.33	40.5266830	-104.5864134	0.00	
14130.00†	90.000	359.412	6916.00	8014.42	8006.87	-357.36	40.5269575	-104.5864133	0.00	
14230.00†	90.000	359.412	6916.00	8114.39	8106.86	-358.38	40.5272320	-104.5864133	0.00	
14330.00†	90.000	359.412	6916.00	8214.36	8206.86	-359.41	40.5275065	-104.5864133	0.00	
14430.00†	90.000	359.412	6916.00	8314.34	8306.85	-360.44	40.5277810	-104.5864133	0.00	
14530.00†	90.000	359.412	6916.00	8414.31	8406.85	-361.46	40.5280555	-104.5864133	0.00	
14630.00†	90.000	359.412	6916.00	8514.28	8506.84	-362.49	40.5283299	-104.5864133	0.00	
14730.00†	90.000	359.412	6916.00	8614.25	8606.83	-363.51	40.5286044	-104.5864133	0.00	
14830.00†	90.000	359.412	6916.00	8714.22	8706.83	-364.54	40.5288789	-104.5864132	0.00	
14930.00†	90.000	359.412	6916.00	8814.19	8806.82	-365.57	40.5291534	-104.5864132	0.00	
15030.00†	90.000	359.412	6916.00	8914.16	8906.82	-366.59	40.5294279	-104.5864132	0.00	
15130.00†	90.000	359.412	6916.00	9014.13	9006.81	-367.62	40.5297024	-104.5864132	0.00	
15230.00†	90.000	359.412	6916.00	9114.10	9106.81	-368.64	40.5299768	-104.5864132	0.00	
15330.00†	90.000	359.412	6916.00	9214.07	9206.80	-369.67	40.5302513	-104.5864132	0.00	
15430.00†	90.000	359.412	6916.00	9314.04	9306.80	-370.70	40.5305258	-104.5864132	0.00	
15530.00†	90.000	359.412	6916.00	9414.01	9406.79	-371.72	40.5308003	-104.5864131	0.00	
15630.00†	90.000	359.412	6916.00	9513.98	9506.79	-372.75	40.5310748	-104.5864131	0.00	
15730.00†	90.000	359.412	6916.00	9613.96	9606.78	-373.77	40.5313493	-104.5864131	0.00	
15830.00†	90.000	359.412	6916.00	9713.93	9706.78	-374.80	40.5316237	-104.5864131	0.00	
15930.00†	90.000	359.412	6916.00	9813.90	9806.77	-375.83	40.5318982	-104.5864131	0.00	
16030.00†	90.000	359.412	6916.00	9913.87	9906.77	-376.85	40.5321727	-104.5864131	0.00	
16130.00†	90.000	359.412	6916.00	10013.84	10006.76	-377.88	40.5324472	-104.5864130	0.00	
16230.00†	90.000	359.412	6916.00	10113.81	10106.76	-378.91	40.5327217	-104.5864130	0.00	
16330.00†	90.000	359.412	6916.00	10213.78	10206.75	-379.93	40.5329962	-104.5864130	0.00	
16430.00†	90.000	359.412	6916.00	10313.75	10306.74	-380.96	40.5332706	-104.5864130	0.00	
16530.00†	90.000	359.412	6916.00	10413.72	10406.74	-381.98	40.5335451	-104.5864130	0.00	
16630.00†	90.000	359.412	6916.00	10513.69	10506.73	-383.01	40.5338196	-104.5864130	0.00	
16730.00†	90.000	359.412	6916.00	10613.66	10606.73	-384.04	40.5340941	-104.5864130	0.00	
16830.00†	90.000	359.412	6916.00	10713.63	10706.72	-385.06	40.5343686	-104.5864129	0.00	
16930.00†	90.000	359.412	6916.00	10813.60	10806.72	-386.09	40.5346430	-104.5864129	0.00	
17030.00†	90.000	359.412	6916.00	10913.58	10906.71	-387.11	40.5349175	-104.5864129	0.00	
17130.00†	90.000	359.412	6916.00	11013.55	11006.71	-388.14	40.5351920	-104.5864129	0.00	
17230.00†	90.000	359.412	6916.00	11113.52	11106.70	-389.17	40.5354665	-104.5864129	0.00	
17330.00†	90.000	359.412	6916.00	11213.49	11206.70	-390.19	40.5357410	-104.5864129	0.00	
17430.00†	90.000	359.412	6916.00	11313.46	11306.69	-391.22	40.5360155	-104.5864129	0.00	

Planned Wellpath Report

BISHOP A06-722 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-722
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-722 PWB
Slot	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)		

WELLPATH DATA (181 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
17497.59	90.000	359.412	6916.00[2]	11381.03	11374.28	-391.91	40.5362010	-104.5864128	0.00	BHL

HOLE & CASING SECTIONS - Ref Wellbore: BISHOP A06-722 PWB Ref Wellpath: BISHOP A06-722 (REV-C.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

Planned Wellpath Report

BISHOP A06-722 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-722
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-722 PWB
Slot	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
OGDP 1 SEC.07-T06N-R64W	N/A	2.00	149.64	61.03	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.05-T06N-R64W	N/A	20.00	168.08	-4191.33	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.06-T06N-R64W	N/A	20.00	168.08	-4191.33	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.31-T07N-R64W	N/A	20.00	168.08	-4191.33	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.32-T07N-R64W	N/A	20.00	168.08	-4191.33	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
2) BISHOP A06-722 BHL Rev-2 (200'FSL & 841'FEL,SEC.31)	17497.59	6916.00	11374.28	-391.91	**3253927.79**	**1439486.85**	40.5362010	-104.5864128	point
1) BISHOP A06-722 LP Rev-2 (200'FSL & 763'FEL,SEC.06)	7325.96	6916.00	1203.19	-287.54	**3254032.16**	**1429316.12**	40.5082815	-104.5864144	point
BISHOP A06-722 BHL Rev-1 (200'FSL & 841'FEL,SEC.31)	N/A	6974.00	11374.28	-391.91	**3253927.79**	**1439486.85**	40.5362010	-104.5864128	point
BISHOP A06-722 LP Rev-1 (200'FSL & 763'FEL,SEC.06)	N/A	6974.00	1203.19	-287.54	**3254032.16**	**1429316.12**	40.5082815	-104.5864144	point
DP 136 Hardlines (200'FNL/FSL & 300'FEL/FWL)	N/A	7003.00	149.84	44.90	3254364.58	1428262.81	40.5053810	-104.5852580	polygon
	2D Polygon: dimensions not calculated								

SURVEY PROGRAM - Ref Wellbore: BISHOP A06-722 PWB Ref Wellpath: BISHOP A06-722 (REV-C.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1950.00	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-722 PWB
1950.00	17497.59	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-722 PWB

Planned Wellpath Report

BISHOP A06-722 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-722**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-722 PWB**
Slot	**SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)**		

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	336.512	30.00	SHL
2000.00	0.000	336.512	2000.00	End of Tangent
2427.68	8.554	336.512	2426.10	Build (XS)
6413.47	8.554	336.512	6367.54	KOP
7325.96	90.000	359.412	6916.00	LP/TPZ
17497.59	90.000	359.412	6916.00	BHL

Closest Approach Clearance Summary Report

BISHOP A06-722 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-722**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-722 PWB**
Slot	**SLOT#23 BISHOP A06-722 (1009'FNL & 486'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	**Martsam01**
Scale	**0.999967**	Report Generated	**10/6/2023** at **11:07:31 AM**
Convergence at slot	**0.59° 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	-149.64	-61.03	3254319.69	1428112.97	**40°30'17.8956"N**	**104°35'7.5300"W**
Facility Reference Pt			3254380.72	1428262.61	**40°30'19.3680"N**	**104°35'6.7200"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 (4744'GL+30'KB@4774'RKB) (RKB) to Facility Vertical Datum	**4774.00ft**
Horizontal Reference Pt	**Slot**	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Mean Sea Level	**4774.00ft**
Vertical Reference Pt	**RIG (4744'GL+30'KB@4774'RKB) (RKB)**	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Ground Level at Slot (SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07))	**4774.00ft**
MD Reference Pt	**RIG (4744'GL+30'KB@4774'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	**7.38° East of TN**	Dip Angle	**66.68°**	Mag Field Strength	**51663 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

BISHOP A06-722 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-722**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-722 PWB**
Slot	**SLOT#23 BISHOP A06-722 (1009'FNL & 486'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: BISHOP A06-722 PWB Ref Wellpath: BISHOP A06-722 (REV-C.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: BISHOP A06-722 PWB Ref Wellpath: BISHOP A06-722 (REV-C.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1950.00	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-722 PWB
1950.00	17497.59	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-722 PWB

Closest Approach Clearance Summary Report

BISHOP A06-722 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-722**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-722 PWB**
Slot	**SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)**		

CALCULATION RANGE & CUTOFF

From: **30.00ft MD** | To: **17497.59ft MD** | C-C Cutoff: **(none)**

OFFSET WELL CLEARANCE SUMMARY (73 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.31-T07N-R64W	SLOT#02 PFENNING #43-31 (05-123-22378)	PFENNING #43-31	PFENNING #43-31 AWB	PFENNING #43-31 AWP	Drilling	14207.41	54.67	14207.41	14207.41	0.01	14207.41	FAIL
SEC.31-T07N-R64W	SLOT#10 PFENNING #44-31 (05-123-22574)	PFENNING #44-31	PFENNING #44-31 AWB	PFENNING #44-31 AWP	Drilling	13274.75	62.98	13274.75	13274.75	0.01	13274.75	FAIL
SEC.06-T06N-R64W	SLOT#02 KREPS #43-6 (05-123-22600)	KREPS #43-6	KREPS #43-6 AWB	KREPS #43-6 AWP	Drilling	8932.07	301.45	8932.07	8932.07	0.04	8932.07	FAIL
SEC.06-T06N-R64W	SLOT#08 KREPS TRUST #44-6 (05-123-21722)	KREPS TRUST #44-6	KREPS TRUST #44-6 AWB	KREPS TRUST #44-6 AWP	Drilling	7930.19	307.06	7930.19	7930.19	0.04	7930.19	FAIL
SEC.06-T06N-R64W	SLOT#13 KREPS TRUST #34-6 (05-123-21723)	KREPS TRUST #34-6	KREPS TRUST #34-6 AWB	KREPS TRUST #34-6 AWP	Drilling	7587.70	935.90	7587.70	7587.70	0.11	7587.70	FAIL
SEC.06-T06N-R64W	SLOT#05 KREPS #33-6 (05-123-22597)	KREPS #33-6	KREPS #33-6 AWB	KREPS #33-6 AWP	Drilling	9146.98	997.08	9146.98	9146.99	0.12	9146.99	FAIL
SEC.06-T06N-R64W	SLOT#04 KREPS #31-6 (05-123-22628)	KREPS #31-6	KREPS #31-6 AWB	KREPS #31-6 AWP	Drilling	11799.23	1136.09	11799.23	11799.25	0.13	11799.25	FAIL
SEC.31-T07N-R64W	SLOT#05 UYEMURA #33-31 (05-123-22441)	UYEMURA #33-31	UYEMURA #33-31 AWB	UYEMURA #33-31 AWP	Drilling	14196.46	1152.76	14196.46	14196.46	0.14	14196.46	FAIL
SEC.31-T07N-R64W	SLOT#14 UYEMURA #34-31 (05-123-21921)	UYEMURA #34-31	UYEMURA #34-31 AWB	UYEMURA #34-31 AWP	Drilling	12972.34	1175.01	12972.34	12972.34	0.14	12972.34	FAIL
SEC.07-T06N-R64W	SLOT#37 DYER #42-7 (05-123-13959)	DYER #42-7 (05-123-13959)	DYER #42-7 AWB	DYER #42-7 AWP (05-123-13959)	Drilling	30.00	1083.32	2000.00	6486.03	0.20	6486.03	FAIL
SEC.06-T06N-R64W	SLOT#12 Stille #12-6H (05-123-34410)	Stille #12-6H	Stille #12-6H AWB	Stille #12-6H AWP	Drilling	11037.32	32.19	11037.32	11060.79	0.25	11060.79	FAIL
SEC.07-T06N-R64W	SLOT#41 Ehrlich #32-7 (05-123-20196)	Ehrlich #32-7 (05-123-20196)	Ehrlich #32-7 AWB	Ehrlich #32-7 AWP	Drilling	30.00	1739.92	2000.00	6569.71	0.26	6569.71	FAIL
SEC.06-T06N-R64W	SLOT#09 KREPS #24-6 (05-123-23621)	KREPS #24-6	KREPS #24-6 AWB	KREPS #24-6 AWP	Drilling	7667.87	2256.74	7667.87	7667.90	0.27	7667.90	FAIL
SEC.06-T06N-R64W	SLOT#03 STEPHENSON #6-31 (05-123-22625)	STEPHENSON #6-31	STEPHENSON #6-31 AWB	STEPHENSON #6-31 AWP	Drilling	9070.51	2290.04	9070.51	9070.55	0.27	9070.55	FAIL
SEC.07-T06N-R64W	SLOT#30 KREPS #21-7 (05-123-20207)	KREPS #21-7 (05-123-20207)	KREPS #21-7 AWB	KREPS #21-7 AWP	Drilling	6682.97	2602.42	6682.97	7057.90	0.31	7057.90	FAIL
SEC.31-T07N-R64W	SLOT#08 BAY-USX AB #31-19 (05-123-24610)	BAY-USX AB #31-19	BAY-USX AB #31-19 AWB	BAY-USX AB #31-19 AWP	Drilling	16203.59	3043.26	16203.59	16203.86	0.36	16203.86	FAIL
SEC.07-T06N-R64W	SLOT#35 CARLSON #33-7 (05-123-19548)	CARLSON #33-7 (05-123-19548)	CARLSON #33-7 AWB	CARLSON #33-7 AWP	Drilling	130.00	2582.04	2000.00	6631.05	0.38	6631.05	FAIL
SEC.31-T07N-R64W	SLOT#15 OWL CREEK #9 (05-123-11935)	OWL CREEK #9	OWL CREEK #9 AWB	OWL CREEK #9 AWP	Drilling	13016.19	3554.79	13016.19	13016.45	0.42	13016.45	FAIL
SEC.07-T06N-R64W	SLOT#38 EHRLICH #22-7 (05-123-14184)	EHRLICH #22-7 (05-123-14184)	EHRLICH #22-7 AWB	EHRLICH #22-7 AWP	Drilling	130.00	3432.48	2000.00	6801.27	0.44	6801.27	FAIL
SEC.07-T06N-R64W	SLOT#34 KREPS #11-7 (05-123-14166)	KREPS #11-7 (05-123-14166)	KREPS #11-7 AWB	KREPS #11-7 AWP	Drilling	6709.29	3746.34	6709.29	7146.51	0.45	7146.51	FAIL
SEC.07-T06N-R64W	SLOT#32 EHRLICH #3 (05-123-12737)	EHRLICH #3 (05-123-12737)	EHRLICH #3 AWB	EHRLICH #3 AWP	Drilling	130.00	3575.38	2000.00	6756.14	0.48	6756.14	FAIL
SEC.07-T06N-R64W	SLOT#42 EHRLICH #4 (05-123-12738)	EHRLICH #4 (05-123-12738)	EHRLICH #4 AWB	EHRLICH #4 AWP	Drilling	6157.55	3992.24	6157.55	6940.15	0.49	6940.15	FAIL
SEC.31-T07N-R64W	SLOT#07 ROUSE USX AB #31-08 (05-123-29406)	ROUSE USX AB #31-08	ROUSE USX AB #31-08 AWB	ROUSE USX AB #31-08 AWP	Drilling	15583.10	237.43	15583.10	15583.30	0.72	15583.30	FAIL
SEC.07-T06N-R64W	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)	BISHOP A06-731	BISHOP A06-731 PWB	BISHOP A06-731 (REV-B.0) PWP	Planned	2001.95	22.53	17430.00	2033.21	1.01	17497.59	WARN
SEC.31-T07N-R64W	SLOT#01 ROUSE USX AB #31-01 (05-123-29401)	ROUSE USX AB #31-01	ROUSE USX AB #31-01 AWB	ROUSE USX AB #31-01 AWP	Drilling	17213.80	306.01	17213.80	17214.60	1.06	17214.60	WARN

Closest Approach Clearance Summary Report

BISHOP A06-722 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-722**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-722 PWB**
Slot	**SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)**		

CALCULATION RANGE & CUTOFF

From: **30.00ft MD**	To: **17497.59ft MD**	C-C Cutoff: **(none)**

OFFSET WELL CLEARANCE SUMMARY (73 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.31-T07N-R64W	SLOT#06 ROUSE-USX AB #31-17 (05-123-24694)	ROUSE-USX AB #31-17	ROUSE-USX AB #31-17 AWB	ROUSE-USX AB #31-17 AWP	Drilling	16362.72	317.72	16362.72	16366.17	1.14	16366.17	PASS
SEC.07-T06N-R64W	SLOT#29 DYER #41-7 (05-123-20669)	DYER #41-7 (05-123-20669)	DYER #41-7 AWB	DYER #41-7 AWP	Drilling	4575.71	71.53	4575.71	4629.40	1.92	4629.40	PASS
SEC.07-T06N-R64W	SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)	BISHOP A06-740	BISHOP A06-740 PWB	BISHOP A06-740 (REV-C.0) PWP	Planned	2001.77	45.05	17430.00	2003.95	2.27	17497.59	PASS
SEC.07-T06N-R64W	SLOT#24 BISHOP A06-712 (1010'FNL & 463'FEL,SEC.07)	BISHOP A06-712	BISHOP A06-712 PWB	BISHOP A06-712 (REV-C.0) PWP	Planned	30.00	22.53	17497.59	788.29	2.42	17497.59	PASS
SEC.07-T06N-R64W	SLOT#15 BISHOP A18-724 (859'FNL & 484'FEL,SEC.07)	BISHOP A18-724	BISHOP A18-724 PWB	BISHOP A18-724 (REV-C.0) PWP	Planned	30.00	150.11	7075.35	7075.35	2.92	7075.35	PASS
SEC.31-T07N-R64W	SLOT#03 ROUSE USX AB #31-02 (05-123-29402)	ROUSE USX AB #31-02	ROUSE USX AB #31-02 AWB	ROUSE USX AB #31-02 AWP	Drilling	17171.51	1315.91	17171.51	17205.80	4.02	17205.80	PASS
SEC.07-T06N-R64W	SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07)	BISHOP A08-665	BISHOP A08-665 PWB	BISHOP A08-665 (REV-C.0) PWP	Planned	2055.16	82.51	2055.16	2061.35	4.28	2061.35	PASS
SEC.31-T07N-R64W	SLOT#12 ROUSE USX AB #31-07 (05-123-29400)	ROUSE USX AB #31-07	ROUSE USX AB #31-07 AWB	ROUSE USX AB #31-07 AWP	Drilling	15522.95	1336.23	15522.95	15563.12	4.71	15563.12	PASS
SEC.07-T06N-R64W	SLOT#25 BISHOP A05-783 (1010'FNL & 441'FEL,SEC.07)	BISHOP A05-783	BISHOP A05-783 PWB	BISHOP A05-783 (REV-C.0) PWP	Planned	30.00	45.05	17497.59	17497.59	5.23	17497.59	PASS
SEC.07-T06N-R64W	SLOT#02 BISHOP A08-675 (861'FNL & 417'FEL,SEC.07)	BISHOP A08-675	BISHOP A08-675 PWB	BISHOP A08-675 (REV-C.0) PWP	Planned	2958.18	121.65	2958.18	3094.14	5.77	3094.14	PASS
SEC.07-T06N-R64W	SLOT#04 BISHOP A08-655 (862'FNL & 372'FEL,SEC.07)	BISHOP A08-655	BISHOP A08-655 PWB	BISHOP A08-655 (REV-C.0) PWP	Planned	1675.07	106.13	1675.07	1775.20	6.39	1775.20	PASS
SEC.07-T06N-R64W	SLOT#01 BISHOP A08-685 (860'FNL & 439'FEL,SEC.07)	BISHOP A08-685	BISHOP A08-685 PWB	BISHOP A08-685 (REV-C.0) PWP	Planned	30.00	156.42	4030.00	6262.60	6.72	6262.60	PASS
SEC.07-T06N-R64W	SLOT#16 BISHOP A18-715 (860'FNL & 462'FEL,SEC.07)	BISHOP A18-715	BISHOP A18-715 PWB	BISHOP A18-715 (REV-C.0) PWP	Planned	30.00	151.63	7111.38	7111.38	7.10	7111.38	PASS
SEC.31-T07N-R64W	SLOT#09 BAY-USX AB #31-6 (05-123-26532)	BAY-USX AB #31-6	BAY-USX AB #31-6 AWB	BAY-USX AB #31-6 AWP	Drilling	15529.91	2288.59	15529.91	15629.41	7.50	15629.41	PASS
SEC.07-T06N-R64W	SLOT#26 BISHOP A05-773 (1011'FNL & 418'FEL,SEC.07)	BISHOP A05-773	BISHOP A05-773 PWB	BISHOP A05-773 (REV-C.0) PWP	Planned	30.00	67.58	17497.59	17497.59	7.85	17497.59	PASS
SEC.07-T06N-R64W	SLOT#20 BRASKALAND A06-756 (642'FNL & 320'FWL,SEC.07)	BRASKALAND A06-756	BRASKALAND A06-756 PWB	BRASKALAND A06-756 (REV-C.0) PWP	Planned	17472.60	1833.67	17472.60	17497.59	7.87	17497.59	PASS
SEC.07-T06N-R64W	SLOT#27 BISHOP A05-764 (1011'FNL & 396'FEL,SEC.07)	BISHOP A05-764	BISHOP A05-764 PWB	BISHOP A05-764 (REV-C.0) PWP	Planned	30.00	90.11	17497.59	17497.59	10.37	17497.59	PASS
SEC.07-T06N-R64W	SLOT#19 BRASKALAND A06-765 (665'FNL & 319'FWL,SEC.07)	BRASKALAND A06-765	BRASKALAND A06-765 PWB	BRASKALAND A06-765 (REV-C.0) PWP	Planned	17464.35	2446.73	17464.35	17497.59	10.49	17497.59	PASS
SEC.31-T07N-R64W	SLOT#13 BAY USX #AB31-05 (05-123-34163)	BAY USX #AB31-05	BAY USX #AB31-05 AWB	BAY USX #AB31-05 AWP	Drilling	15672.10	3643.47	15672.10	15895.29	11.18	15895.29	PASS
SEC.06-T06N-R64W	SLOT#10 KREPS #32-6 (05-123-22629)	KREPS #32-6	KREPS #32-6 AWB	KREPS #32-6 AWP	Drilling	10608.70	1058.10	10608.70	10702.89	11.36	10702.89	PASS
SEC.31-T07N-R64W	SLOT#04 BAY USX #AB31-04 (05-123-34162)	BAY USX #AB31-04	BAY USX #AB31-04 AWB	BAY USX #AB31-04 AWP	Drilling	16950.86	3621.09	16950.86	17218.23	11.87	17218.23	PASS
SEC.07-T06N-R64W	SLOT#28 BISHOP A05-755 (1012'FNL & 373'FEL,SEC.07)	BISHOP A05-755	BISHOP A05-755 PWB	BISHOP A05-755 (REV-C.0) PWP	Planned	30.00	112.63	17430.00	17497.59	13.03	17497.59	PASS
SEC.07-T06N-R64W	SLOT#18 BRASKALAND A06-773 (687'FNL & 319'FWL,SEC.07)	BRASKALAND A06-773	BRASKALAND A06-773 PWB	BRASKALAND A06-773 (REV-C.0) PWP	Planned	17456.10	3056.19	17456.10	17497.59	13.14	17497.59	PASS
SEC.07-T06N-R64W	SLOT#14 BISHOP A18-733 (859'FNL & 507'FEL,SEC.07)	BISHOP A18-733	BISHOP A18-733 PWB	BISHOP A18-733 (REV-C.0) PWP	Planned	30.00	151.54	7230.00	7286.15	13.86	7286.15	PASS
SEC.07-T06N-R64W	SLOT#17 BRASKALAND A06-782 (710'FNL & 319'FWL,SEC.07)	BRASKALAND A06-782	BRASKALAND A06-782 PWB	BRASKALAND A06-782 (REV-C.0) PWP	Planned	17447.85	3668.53	17447.85	17497.59	15.80	17497.59	PASS

Closest Approach Clearance Summary Report

BISHOP A06-722 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-722**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-722 PWB**
Slot	**SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)**		

CALCULATION RANGE & CUTOFF

From: **30.00ft MD** To: **17497.59ft MD** C-C Cutoff: **(none)**

OFFSET WELL CLEARANCE SUMMARY (73 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-T06N-R64W	SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07)	BISHOP A18-742	BISHOP A18-742 PWB	BISHOP A18-742 (REV-C.0) PWP	Planned	30.00	156.59	7530.00	957.62	18.59	7530.00	PASS
SEC.31-T07N-R64W	SLOT#11 ARY-USX AB #31-14 (05-123-24611)	ARY-USX AB #31-14	ARY-USX AB #31-14 AWB	ARY-USX AB #31-14 AWP	Drilling	12987.21	2405.74	12987.21	13357.05	19.94	13357.05	PASS
SEC.07-T06N-R64W	SLOT#33 KREPS #1 (05-123-12736)	KREPS #1 (05-123-12736)	KREPS #1 AWB	KREPS #1 AWP	Drilling	6536.12	1164.81	6536.12	6789.10	22.12	6789.10	PASS
SEC.06-T06N-R64W	SLOT#01 MOODY #21-6 (05-123-23586)	MOODY #21-6	MOODY #21-6 AWB	MOODY #21-6 AWP	Drilling	11529.38	2517.89	11529.38	11988.22	24.08	11988.22	PASS
SEC.06-T06N-R64W	SLOT#07 MOODY #22-6 (05-123-22579)	MOODY #22-6	MOODY #22-6 AWB	MOODY #22-6 AWP	Drilling	10215.61	2229.95	10215.61	10612.40	24.52	10612.40	PASS
SEC.07-T06N-R64W	SLOT#12 BRASKALAND A18-755 (800'FNL & 319'FWL,SEC.07)	BRASKALAND A18-755	BRASKALAND A18-755 PWB	BRASKALAND A18-755 (REV-C.0) PWP	Planned	7028.32	1898.89	7028.32	7137.51	34.91	7137.51	PASS
SEC.06-T06N-R64W	SLOT#11 MOODY #12-6 (05-123-22569)	MOODY #12-6	MOODY #12-6 AWB	MOODY #12-6 AWP	Drilling	10233.04	3658.57	10233.04	11271.68	38.77	11271.68	PASS
SEC.06-T06N-R64W	SLOT#15 KREPS #6-35 (05-123-24937)	KREPS #6-35	KREPS #6-35 AWB	KREPS #6-35 AWP	Drilling	8384.78	3237.93	8384.78	9249.61	42.07	9249.61	PASS
SEC.06-T06N-R64W	SLOT#06 STEPHENSON #6-32 (05-123-22622)	STEPHENSON #6-32	STEPHENSON #6-32 AWB	STEPHENSON #6-32 AWP	Drilling	8895.87	3551.74	8895.87	9954.01	43.40	9954.01	PASS
SEC.07-T06N-R64W	SLOT#11 BRASKALAND A18-764 (777'FNL & 319'FWL,SEC.07)	BRASKALAND A18-764	BRASKALAND A18-764 PWB	BRASKALAND A18-764 (REV-C.0) PWP	Planned	7076.58	2480.09	7076.58	7743.55	46.18	7743.55	PASS
SEC.07-T06N-R64W	SLOT#05 CARLSON A08-645 (1424'FSL & 919'FEL,SEC.07)	CARLSON A08-645	CARLSON A08-645 PWB	CARLSON A08-645 (REV-C.0) PWP	Planned	6122.86	2606.68	6122.86	6518.97	48.45	6518.97	PASS
SEC.06-T06N-R64W	SLOT#14 STEPHENSON #6-33 (05-123-22623)	STEPHENSON #6-33	STEPHENSON #6-33 AWB	STEPHENSON #6-33 AWP	Drilling	7881.35	3842.23	7881.35	9078.81	51.56	9078.81	PASS
SEC.07-T06N-R64W	SLOT#10 BRASKALAND A18-773 (755'FNL & 319'FWL,SEC.07)	BRASKALAND A18-773	BRASKALAND A18-773 PWB	BRASKALAND A18-773 (REV-C.0) PWP	Planned	7101.71	3059.29	7101.71	8459.09	56.80	8459.09	PASS
SEC.07-T06N-R64W	SLOT#31 ROY CARLSON #43-7 (05-123-21867)	ROY CARLSON #43-7 (05-123-21867)	ROY CARLSON #43-7 AWB	ROY CARLSON #43-7 AWP	Drilling	30.00	2292.42	30.00	6638.63	59.53	6638.63	PASS
SEC.07-T06N-R64W	SLOT#06 CARLSON A08-635 (1423'FSL & 882'FEL,SEC.07)	CARLSON A08-635	CARLSON A08-635 PWB	CARLSON A08-635 (REV-C.0) PWP	Planned	2212.50	2865.66	2212.50	6579.57	61.77	6579.57	PASS
SEC.07-T06N-R64W	SLOT#09 BRASKALAND A18-782 (732'FNL & 319'FWL,SEC.07)	BRASKALAND A18-782	BRASKALAND A18-782 PWB	BRASKALAND A18-782 (REV-C.0) PWP	Planned	7182.44	3636.63	7182.44	9075.55	65.37	9075.55	PASS
SEC.07-T06N-R64W	SLOT#07 CARLSON A08-625 (1423'FSL & 844'FEL,SEC.07)	CARLSON A08-625	CARLSON A08-625 PWB	CARLSON A08-625 (REV-C.0) PWP	Planned	30.00	2861.51	2000.00	6660.08	75.57	6660.08	PASS
SEC.07-T06N-R64W	SLOT#39 CARLSON #44-7 (05-123-14171)	CARLSON #44-7 (05-123-14171)	CARLSON #44-7 AWB	CARLSON #44-7 AWP (05-123-14171)	Drilling	30.00	3510.50	30.00	6730.59	83.12	6730.59	PASS
SEC.07-T06N-R64W	SLOT#43 CARLSON #34-7 (05-123-14251)	CARLSON #34-7 (05-123-14251)	CARLSON #34-7 AWB	CARLSON #34-7 AWP	Drilling	409.54	3909.86	1230.00	6811.12	84.42	6811.12	PASS
SEC.07-T06N-R64W	SLOT#36 EHRLICH #1 (05-123-12382)	EHRLICH #1 (05-123-12382)	EHRLICH #1 AWB	EHRLICH #1 AWP	Drilling	71.00	4549.14	730.00	7001.42	90.43	7001.42	PASS
SEC.07-T06N-R64W	SLOT#08 CARLSON A08-615 (1422'FSL & 807'FEL,SEC.07)	CARLSON A08-615	CARLSON A08-615 PWB	CARLSON A08-615 (REV-C.0) PWP	Planned	30.00	2856.84	2000.00	6639.87	90.82	6639.87	PASS
SEC.07-T06N-R64W	SLOT#40 EHRLICH #24-7 (05-123-20469)	EHRLICH #24-7 (05-123-20469)	EHRLICH #24-7 AWB	EHRLICH #24-7 AWP	Drilling	316.25	4568.56	316.25	6832.01	94.51	6832.01	PASS
SEC.07-T06N-R64W	SLOT#44 EHRLICH #2 (05-123-12460)	EHRLICH #2 (05-123-12460)	EHRLICH #2 AWB	EHRLICH #2 AWP	Drilling	1702.21	5380.05	1702.21	6922.19	106.25	6922.19	PASS