NOBLE ENERGY, INC

Location:	COLORADO	Slot:	SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)
Field:	WELD COUNTY (NOBLE NAD 83 GRID)	Well:	BISHOP A06-740
Facility:	SEC.07-T06N-R64W	Wellbore:	BISHOP A06-740 PWB

Plot reference wellpath is BISHOP A06-740 (REV-C.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (4743'GL+30'KB@4773'RKB) (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to RIG (4743'GL+30'KB@4773'RKB) (RKB)	Scale: True distance
RIG (4743'GL+30'KB@4773'RKB) (RKB) to Mean Sea Level: 4773 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#21 BISHOP A06-740 (1008'FNL & 531'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#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)	-149.74	-106.08	3254274.639	1428112.873	40°30'17.8992"N	104°35'8.1132"W

RIG (4743'GL+30'KB@4773'RKB) (RKB) to Ground level (At Slot: SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07))	4773ft
Mean Sea Level to Ground level (At Slot: SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07))	0ft
RIG (4743'GL+30'KB@4773'RKB) (RKB) to Mean Sea Level	4773ft

Well Profile Data

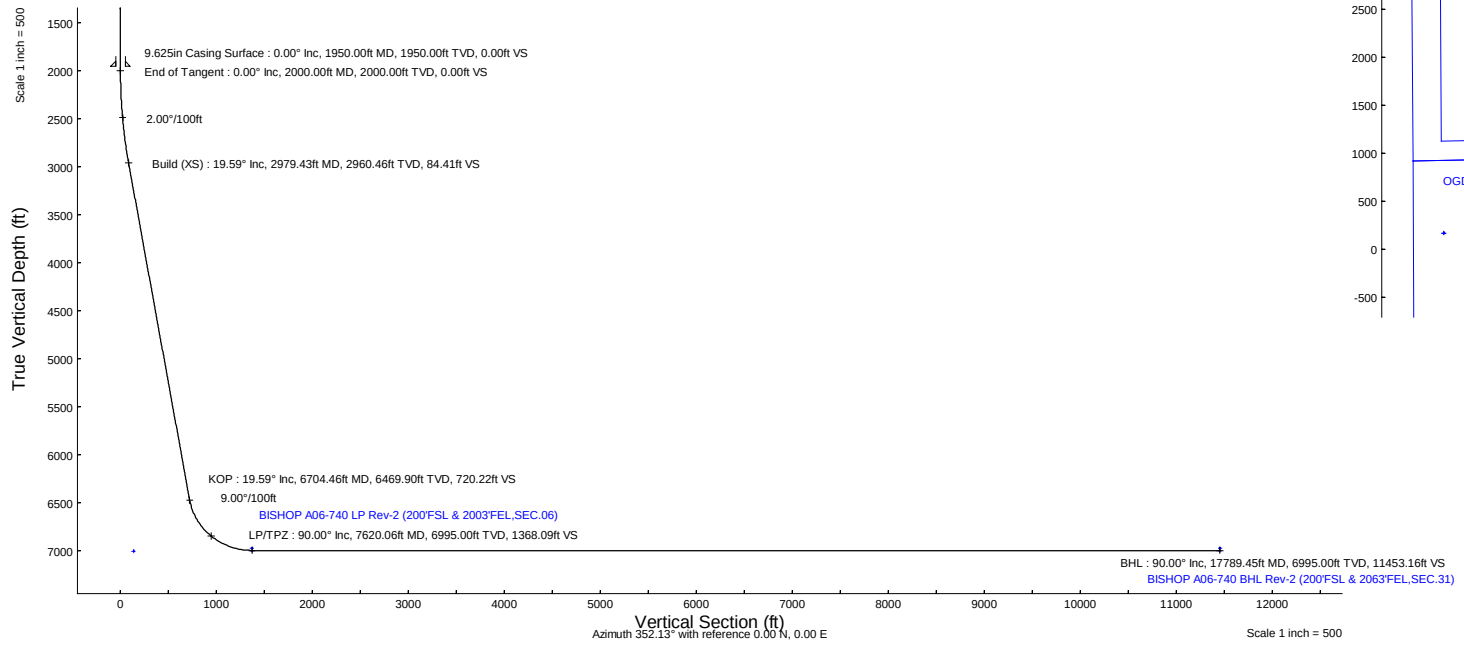
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
SHL	30.00	0.000	292.730	30.00	0.00	0.00	0.00	0.00
End of Tangent	2000.00	0.000	292.730	2000.00	0.00	0.00	0.00	0.00
Build (XS)	2979.43	19.589	292.730	2960.46	64.07	-152.93	2.00	84.41
KOP	6704.46	19.589	292.730	6469.90	546.62	-1304.80	0.00	720.22
LP/TPZ	7620.06	90.000	359.509	6995.00	1176.16	-1481.92	9.00	1368.09
BHL	17789.45	90.000	359.509	6995.00	11345.17	-1569.05	0.00	11453.16

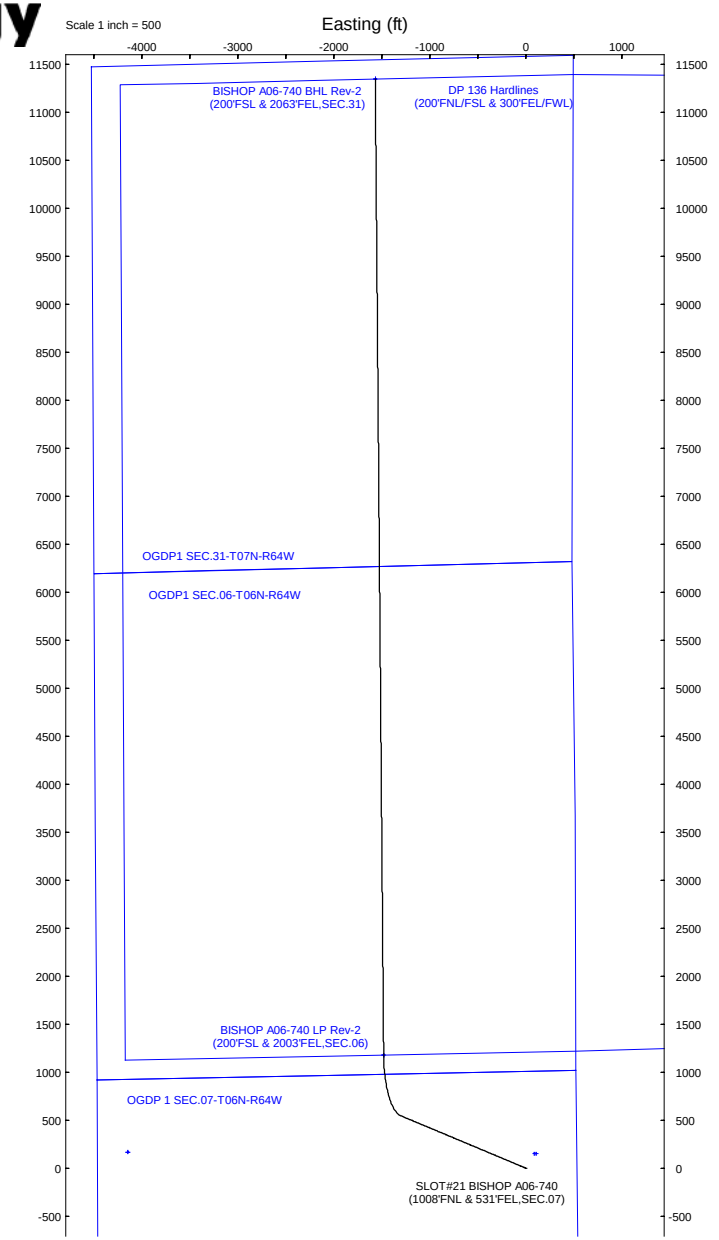
Targets

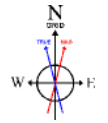
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
OGDP 1 SEC.07-T06N-R64W	N/A	1.00	149.74	106.08	3254380.72	1428262.61	40°30'19.3680"N	104°35'6.7200"W
OGDP1 SEC.06-T06N-R64W	N/A	19.00	168.18	-4146.28	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
OGDP1 SEC.31-T07N-R64W	N/A	19.00	168.18	-4146.28	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
BISHOP A06-740 BHL Rev-1 (200'FSL & 2063'FEL,SEC.31)	N/A	6973.00	11345.17	-1569.05	3252705.65	1439457.65	40°32'10.1591"N	104°35'26.9184"W
BISHOP A06-740 LP Rev-1 (200'FSL & 2003'FEL,SEC.06)	N/A	6973.00	1176.16	-1481.92	3252792.77	1429288.99	40°30'29.6713"N	104°35'27.1403"W
BISHOP A06-740 BHL Rev-2 (200'FSL & 2063'FEL,SEC.31)	17789.45	6995.00	11345.17	-1569.05	3252705.65	1439457.65	40°32'10.1591"N	104°35'26.9184"W
BISHOP A06-740 LP Rev-2 (200'FSL & 2003'FEL,SEC.06)	7620.06	6995.00	1176.16	-1481.92	3252792.77	1429288.99	40°30'29.6713"N	104°35'27.1403"W
DP 136 Hardlines (200'FNL/FSL & 300'FEL/FWL)	N/A	7002.00	149.94	89.95	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 A06-740 PWB
1950.00	17789.45	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-740 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 A06-740 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'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 **11:19:10 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	-149.74	-106.08	3254274.64	1428112.87	**40.5049720°**	**-104.5855870°**
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 (4743'GL+30'KB@4773'RKB) (RKB) to Facility Vertical Datum	**4773.00ft**
Horizontal Reference Pt	**Slot**	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Mean Sea Level	**4773.00ft**
Vertical Reference Pt	**RIG (4743'GL+30'KB@4773'RKB) (RKB)**	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Ground Level at Slot (SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07))	**4773.00ft**
MD Reference Pt	**RIG (4743'GL+30'KB@4773'RKB) (RKB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**352.13°**

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-740 PWB
Slot	SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)		

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	292.730	0.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
30.00	0.000	292.730	30.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	SHL
130.00†	0.000	292.730	130.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
230.00†	0.000	292.730	230.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
330.00†	0.000	292.730	330.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
430.00†	0.000	292.730	430.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
530.00†	0.000	292.730	530.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
630.00†	0.000	292.730	630.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
730.00†	0.000	292.730	730.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
830.00†	0.000	292.730	830.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
930.00†	0.000	292.730	930.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1030.00†	0.000	292.730	1030.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1130.00†	0.000	292.730	1130.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1230.00†	0.000	292.730	1230.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1330.00†	0.000	292.730	1330.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1430.00†	0.000	292.730	1430.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1530.00†	0.000	292.730	1530.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1630.00†	0.000	292.730	1630.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1730.00†	0.000	292.730	1730.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1830.00†	0.000	292.730	1830.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
1930.00†	0.000	292.730	1930.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	
2000.00	0.000	292.730	2000.00	0.00	0.00	0.00	40.5049720	-104.5855870	0.00	End of Tangent
2030.00†	0.600	292.730	2030.00	0.08	0.06	-0.14	40.5049722	-104.5855875	2.00	
2130.00†	2.600	292.730	2129.96	1.50	1.14	-2.72	40.5049752	-104.5855967	2.00	
2230.00†	4.600	292.730	2229.75	4.70	3.57	-8.51	40.5049820	-104.5856175	2.00	
2330.00†	6.600	292.730	2329.27	9.67	7.34	-17.51	40.5049926	-104.5856497	2.00	
2430.00†	8.600	292.730	2428.39	16.40	12.45	-29.71	40.5050070	-104.5856934	2.00	
2530.00†	10.600	292.730	2526.98	24.89	18.89	-45.09	40.5050251	-104.5857484	2.00	
2630.00†	12.600	292.730	2624.93	35.13	26.66	-63.63	40.5050470	-104.5858148	2.00	
2730.00†	14.600	292.730	2722.13	47.10	35.74	-85.32	40.5050725	-104.5858925	2.00	
2830.00†	16.600	292.730	2818.44	60.79	46.13	-110.12	40.5051017	-104.5859813	2.00	
2930.00†	18.600	292.730	2913.75	76.18	57.82	-138.01	40.5051346	-104.5860811	2.00	
2979.43	19.589	292.730	2960.46	84.41	64.07	-152.93	40.5051522	-104.5861345	2.00	Build (XS)
3030.00†	19.589	292.730	3008.10	93.04	70.62	-168.56	40.5051706	-104.5861905	0.00	
3130.00†	19.589	292.730	3102.32	110.11	83.57	-199.48	40.5052070	-104.5863012	0.00	
3230.00†	19.589	292.730	3196.53	127.18	96.52	-230.41	40.5052435	-104.5864119	0.00	
3330.00†	19.589	292.730	3290.74	144.25	109.48	-261.33	40.5052799	-104.5865226	0.00	
3430.00†	19.589	292.730	3384.95	161.32	122.43	-292.25	40.5053163	-104.5866333	0.00	
3530.00†	19.589	292.730	3479.17	178.39	135.39	-323.18	40.5053527	-104.5867441	0.00	
3630.00†	19.589	292.730	3573.38	195.45	148.34	-354.10	40.5053892	-104.5868548	0.00	
3730.00†	19.589	292.730	3667.59	212.52	161.30	-385.02	40.5054256	-104.5869655	0.00	
3830.00†	19.589	292.730	3761.80	229.59	174.25	-415.94	40.5054620	-104.5870762	0.00	
3930.00†	19.589	292.730	3856.02	246.66	187.21	-446.87	40.5054985	-104.5871869	0.00	
4030.00†	19.589	292.730	3950.23	263.73	200.16	-477.79	40.5055349	-104.5872976	0.00	
4130.00†	19.589	292.730	4044.44	280.80	213.11	-508.71	40.5055713	-104.5874083	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-740 PWB
Slot	SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)		

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4230.00†	19.589	292.730	4138.65	297.87	226.07	-539.63	40.5056078	-104.5875190	0.00	
4330.00†	19.589	292.730	4232.87	314.93	239.02	-570.56	40.5056442	-104.5876298	0.00	
4430.00†	19.589	292.730	4327.08	332.00	251.98	-601.48	40.5056806	-104.5877405	0.00	
4530.00†	19.589	292.730	4421.29	349.07	264.93	-632.40	40.5057170	-104.5878512	0.00	
4630.00†	19.589	292.730	4515.50	366.14	277.89	-663.32	40.5057535	-104.5879619	0.00	
4730.00†	19.589	292.730	4609.72	383.21	290.84	-694.25	40.5057899	-104.5880726	0.00	
4830.00†	19.589	292.730	4703.93	400.28	303.80	-725.17	40.5058263	-104.5881833	0.00	
4930.00†	19.589	292.730	4798.14	417.35	316.75	-756.09	40.5058628	-104.5882940	0.00	
5030.00†	19.589	292.730	4892.35	434.41	329.70	-787.01	40.5058992	-104.5884047	0.00	
5130.00†	19.589	292.730	4986.56	451.48	342.66	-817.94	40.5059356	-104.5885155	0.00	
5230.00†	19.589	292.730	5080.78	468.55	355.61	-848.86	40.5059720	-104.5886262	0.00	
5330.00†	19.589	292.730	5174.99	485.62	368.57	-879.78	40.5060085	-104.5887369	0.00	
5430.00†	19.589	292.730	5269.20	502.69	381.52	-910.70	40.5060449	-104.5888476	0.00	
5530.00†	19.589	292.730	5363.41	519.76	394.48	-941.63	40.5060813	-104.5889583	0.00	
5630.00†	19.589	292.730	5457.63	536.83	407.43	-972.55	40.5061178	-104.5890690	0.00	
5730.00†	19.589	292.730	5551.84	553.89	420.39	-1003.47	40.5061542	-104.5891797	0.00	
5830.00†	19.589	292.730	5646.05	570.96	433.34	-1034.39	40.5061906	-104.5892905	0.00	
5930.00†	19.589	292.730	5740.26	588.03	446.29	-1065.32	40.5062270	-104.5894012	0.00	
6030.00†	19.589	292.730	5834.48	605.10	459.25	-1096.24	40.5062635	-104.5895119	0.00	
6130.00†	19.589	292.730	5928.69	622.17	472.20	-1127.16	40.5062999	-104.5896226	0.00	
6230.00†	19.589	292.730	6022.90	639.24	485.16	-1158.08	40.5063363	-104.5897333	0.00	
6330.00†	19.589	292.730	6117.11	656.31	498.11	-1189.01	40.5063727	-104.5898440	0.00	
6430.00†	19.589	292.730	6211.33	673.37	511.07	-1219.93	40.5064092	-104.5899547	0.00	
6530.00†	19.589	292.730	6305.54	690.44	524.02	-1250.85	40.5064456	-104.5900655	0.00	
6630.00†	19.589	292.730	6399.75	707.51	536.98	-1281.78	40.5064820	-104.5901762	0.00	
6704.46	19.589	292.730	6469.90	720.22	546.62	-1304.80	40.5065092	-104.5902586	0.00	KOP
6730.00†	20.556	298.809	6493.89	725.08	550.44	-1312.68	40.5065198	-104.5902868	9.00	
6830.00†	25.940	317.265	6585.86	753.57	575.01	-1342.97	40.5065882	-104.5903948	9.00	
6930.00†	32.857	329.088	6673.00	796.57	614.43	-1371.80	40.5066972	-104.5904970	9.00	
7030.00†	40.525	337.016	6753.18	853.02	667.73	-1398.48	40.5068442	-104.5905910	9.00	
7130.00†	48.585	342.743	6824.40	921.52	733.58	-1422.34	40.5070256	-104.5906744	9.00	
7230.00†	56.866	347.184	6884.93	1000.39	810.37	-1442.79	40.5072370	-104.5907451	9.00	
7330.00†	65.277	350.849	6933.27	1087.69	896.22	-1459.34	40.5074730	-104.5908014	9.00	
7430.00†	73.766	354.045	6968.23	1181.27	988.99	-1471.57	40.5077280	-104.5908420	9.00	
7530.00†	82.299	356.974	6988.96	1278.82	1086.42	-1479.18	40.5079957	-104.5908658	9.00	
7620.06	90.000	359.509	6995.00[1]	1368.09	1176.16	-1481.92	40.5082420	-104.5908723	9.00	LP/TPZ
7630.00†	90.000	359.509	6995.00	1377.95	1186.10	-1482.01	40.5082693	-104.5908723	0.00	
7730.00†	90.000	359.509	6995.00	1477.12	1286.10	-1482.87	40.5085438	-104.5908717	0.00	
7830.00†	90.000	359.509	6995.00	1576.29	1386.09	-1483.72	40.5088183	-104.5908710	0.00	
7930.00†	90.000	359.509	6995.00	1675.46	1486.09	-1484.58	40.5090928	-104.5908704	0.00	
8030.00†	90.000	359.509	6995.00	1774.63	1586.09	-1485.44	40.5093673	-104.5908698	0.00	
8130.00†	90.000	359.509	6995.00	1873.80	1686.08	-1486.29	40.5096417	-104.5908692	0.00	
8230.00†	90.000	359.509	6995.00	1972.97	1786.08	-1487.15	40.5099162	-104.5908686	0.00	
8330.00†	90.000	359.509	6995.00	2072.14	1886.08	-1488.01	40.5101907	-104.5908680	0.00	
8430.00†	90.000	359.509	6995.00	2171.32	1986.07	-1488.86	40.5104652	-104.5908674	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-740 PWB
Slot	SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)		

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8530.00†	90.000	359.509	6995.00	2270.49	2086.07	-1489.72	40.5107397	-104.5908668	0.00	
8630.00†	90.000	359.509	6995.00	2369.66	2186.06	-1490.58	40.5110142	-104.5908662	0.00	
8730.00†	90.000	359.509	6995.00	2468.83	2286.06	-1491.43	40.5112886	-104.5908656	0.00	
8830.00†	90.000	359.509	6995.00	2568.00	2386.06	-1492.29	40.5115631	-104.5908650	0.00	
8930.00†	90.000	359.509	6995.00	2667.17	2486.05	-1493.15	40.5118376	-104.5908644	0.00	
9030.00†	90.000	359.509	6995.00	2766.34	2586.05	-1494.00	40.5121121	-104.5908638	0.00	
9130.00†	90.000	359.509	6995.00	2865.51	2686.05	-1494.86	40.5123866	-104.5908632	0.00	
9230.00†	90.000	359.509	6995.00	2964.68	2786.04	-1495.72	40.5126611	-104.5908626	0.00	
9330.00†	90.000	359.509	6995.00	3063.85	2886.04	-1496.57	40.5129356	-104.5908620	0.00	
9430.00†	90.000	359.509	6995.00	3163.02	2986.04	-1497.43	40.5132100	-104.5908613	0.00	
9530.00†	90.000	359.509	6995.00	3262.20	3086.03	-1498.29	40.5134845	-104.5908607	0.00	
9630.00†	90.000	359.509	6995.00	3361.37	3186.03	-1499.14	40.5137590	-104.5908601	0.00	
9730.00†	90.000	359.509	6995.00	3460.54	3286.02	-1500.00	40.5140335	-104.5908595	0.00	
9830.00†	90.000	359.509	6995.00	3559.71	3386.02	-1500.86	40.5143080	-104.5908589	0.00	
9930.00†	90.000	359.509	6995.00	3658.88	3486.02	-1501.71	40.5145825	-104.5908583	0.00	
10030.00†	90.000	359.509	6995.00	3758.05	3586.01	-1502.57	40.5148569	-104.5908577	0.00	
10130.00†	90.000	359.509	6995.00	3857.22	3686.01	-1503.43	40.5151314	-104.5908571	0.00	
10230.00†	90.000	359.509	6995.00	3956.39	3786.01	-1504.28	40.5154059	-104.5908565	0.00	
10330.00†	90.000	359.509	6995.00	4055.56	3886.00	-1505.14	40.5156804	-104.5908559	0.00	
10430.00†	90.000	359.509	6995.00	4154.73	3986.00	-1506.00	40.5159549	-104.5908553	0.00	
10530.00†	90.000	359.509	6995.00	4253.90	4085.99	-1506.85	40.5162294	-104.5908547	0.00	
10630.00†	90.000	359.509	6995.00	4353.07	4185.99	-1507.71	40.5165038	-104.5908541	0.00	
10730.00†	90.000	359.509	6995.00	4452.25	4285.99	-1508.57	40.5167783	-104.5908535	0.00	
10830.00†	90.000	359.509	6995.00	4551.42	4385.98	-1509.42	40.5170528	-104.5908529	0.00	
10930.00†	90.000	359.509	6995.00	4650.59	4485.98	-1510.28	40.5173273	-104.5908523	0.00	
11030.00†	90.000	359.509	6995.00	4749.76	4585.98	-1511.14	40.5176018	-104.5908516	0.00	
11130.00†	90.000	359.509	6995.00	4848.93	4685.97	-1511.99	40.5178763	-104.5908510	0.00	
11230.00†	90.000	359.509	6995.00	4948.10	4785.97	-1512.85	40.5181507	-104.5908504	0.00	
11330.00†	90.000	359.509	6995.00	5047.27	4885.97	-1513.71	40.5184252	-104.5908498	0.00	
11430.00†	90.000	359.509	6995.00	5146.44	4985.96	-1514.56	40.5186997	-104.5908492	0.00	
11530.00†	90.000	359.509	6995.00	5245.61	5085.96	-1515.42	40.5189742	-104.5908486	0.00	
11630.00†	90.000	359.509	6995.00	5344.78	5185.95	-1516.28	40.5192487	-104.5908480	0.00	
11730.00†	90.000	359.509	6995.00	5443.95	5285.95	-1517.13	40.5195232	-104.5908474	0.00	
11830.00†	90.000	359.509	6995.00	5543.13	5385.95	-1517.99	40.5197976	-104.5908468	0.00	
11930.00†	90.000	359.509	6995.00	5642.30	5485.94	-1518.85	40.5200721	-104.5908462	0.00	
12030.00†	90.000	359.509	6995.00	5741.47	5585.94	-1519.70	40.5203466	-104.5908456	0.00	
12130.00†	90.000	359.509	6995.00	5840.64	5685.94	-1520.56	40.5206211	-104.5908450	0.00	
12230.00†	90.000	359.509	6995.00	5939.81	5785.93	-1521.42	40.5208956	-104.5908444	0.00	
12330.00†	90.000	359.509	6995.00	6038.98	5885.93	-1522.27	40.5211701	-104.5908438	0.00	
12430.00†	90.000	359.509	6995.00	6138.15	5985.93	-1523.13	40.5214445	-104.5908432	0.00	
12530.00†	90.000	359.509	6995.00	6237.32	6085.92	-1523.99	40.5217190	-104.5908426	0.00	
12630.00†	90.000	359.509	6995.00	6336.49	6185.92	-1524.84	40.5219935	-104.5908419	0.00	
12730.00†	90.000	359.509	6995.00	6435.66	6285.91	-1525.70	40.5222680	-104.5908413	0.00	
12830.00†	90.000	359.509	6995.00	6534.83	6385.91	-1526.56	40.5225425	-104.5908407	0.00	
12930.00†	90.000	359.509	6995.00	6634.01	6485.91	-1527.41	40.5228170	-104.5908401	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-740
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-740 PWB
Slot	SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)		

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13030.00†	90.000	359.509	6995.00	6733.18	6585.90	-1528.27	40.5230914	-104.5908395	0.00	
13130.00†	90.000	359.509	6995.00	6832.35	6685.90	-1529.13	40.5233659	-104.5908389	0.00	
13230.00†	90.000	359.509	6995.00	6931.52	6785.90	-1529.98	40.5236404	-104.5908383	0.00	
13330.00†	90.000	359.509	6995.00	7030.69	6885.89	-1530.84	40.5239149	-104.5908377	0.00	
13430.00†	90.000	359.509	6995.00	7129.86	6985.89	-1531.70	40.5241894	-104.5908371	0.00	
13530.00†	90.000	359.509	6995.00	7229.03	7085.88	-1532.56	40.5244639	-104.5908365	0.00	
13630.00†	90.000	359.509	6995.00	7328.20	7185.88	-1533.41	40.5247383	-104.5908359	0.00	
13730.00†	90.000	359.509	6995.00	7427.37	7285.88	-1534.27	40.5250128	-104.5908353	0.00	
13830.00†	90.000	359.509	6995.00	7526.54	7385.87	-1535.13	40.5252873	-104.5908347	0.00	
13930.00†	90.000	359.509	6995.00	7625.71	7485.87	-1535.98	40.5255618	-104.5908341	0.00	
14030.00†	90.000	359.509	6995.00	7724.88	7585.87	-1536.84	40.5258363	-104.5908335	0.00	
14130.00†	90.000	359.509	6995.00	7824.06	7685.86	-1537.70	40.5261108	-104.5908329	0.00	
14230.00†	90.000	359.509	6995.00	7923.23	7785.86	-1538.55	40.5263852	-104.5908322	0.00	
14330.00†	90.000	359.509	6995.00	8022.40	7885.86	-1539.41	40.5266597	-104.5908316	0.00	
14430.00†	90.000	359.509	6995.00	8121.57	7985.85	-1540.27	40.5269342	-104.5908310	0.00	
14530.00†	90.000	359.509	6995.00	8220.74	8085.85	-1541.12	40.5272087	-104.5908304	0.00	
14630.00†	90.000	359.509	6995.00	8319.91	8185.84	-1541.98	40.5274832	-104.5908298	0.00	
14730.00†	90.000	359.509	6995.00	8419.08	8285.84	-1542.84	40.5277577	-104.5908292	0.00	
14830.00†	90.000	359.509	6995.00	8518.25	8385.84	-1543.69	40.5280321	-104.5908286	0.00	
14930.00†	90.000	359.509	6995.00	8617.42	8485.83	-1544.55	40.5283066	-104.5908280	0.00	
15030.00†	90.000	359.509	6995.00	8716.59	8585.83	-1545.41	40.5285811	-104.5908274	0.00	
15130.00†	90.000	359.509	6995.00	8815.76	8685.83	-1546.26	40.5288556	-104.5908268	0.00	
15230.00†	90.000	359.509	6995.00	8914.94	8785.82	-1547.12	40.5291301	-104.5908262	0.00	
15330.00†	90.000	359.509	6995.00	9014.11	8885.82	-1547.98	40.5294046	-104.5908256	0.00	
15430.00†	90.000	359.509	6995.00	9113.28	8985.81	-1548.83	40.5296790	-104.5908250	0.00	
15530.00†	90.000	359.509	6995.00	9212.45	9085.81	-1549.69	40.5299535	-104.5908244	0.00	
15630.00†	90.000	359.509	6995.00	9311.62	9185.81	-1550.55	40.5302280	-104.5908238	0.00	
15730.00†	90.000	359.509	6995.00	9410.79	9285.80	-1551.40	40.5305025	-104.5908232	0.00	
15830.00†	90.000	359.509	6995.00	9509.96	9385.80	-1552.26	40.5307770	-104.5908225	0.00	
15930.00†	90.000	359.509	6995.00	9609.13	9485.80	-1553.12	40.5310515	-104.5908219	0.00	
16030.00†	90.000	359.509	6995.00	9708.30	9585.79	-1553.97	40.5313259	-104.5908213	0.00	
16130.00†	90.000	359.509	6995.00	9807.47	9685.79	-1554.83	40.5316004	-104.5908207	0.00	
16230.00†	90.000	359.509	6995.00	9906.64	9785.79	-1555.69	40.5318749	-104.5908201	0.00	
16330.00†	90.000	359.509	6995.00	10005.82	9885.78	-1556.54	40.5321494	-104.5908195	0.00	
16430.00†	90.000	359.509	6995.00	10104.99	9985.78	-1557.40	40.5324239	-104.5908189	0.00	
16530.00†	90.000	359.509	6995.00	10204.16	10085.77	-1558.26	40.5326983	-104.5908183	0.00	
16630.00†	90.000	359.509	6995.00	10303.33	10185.77	-1559.11	40.5329728	-104.5908177	0.00	
16730.00†	90.000	359.509	6995.00	10402.50	10285.77	-1559.97	40.5332473	-104.5908171	0.00	
16830.00†	90.000	359.509	6995.00	10501.67	10385.76	-1560.83	40.5335218	-104.5908165	0.00	
16930.00†	90.000	359.509	6995.00	10600.84	10485.76	-1561.68	40.5337963	-104.5908159	0.00	
17030.00†	90.000	359.509	6995.00	10700.01	10585.76	-1562.54	40.5340708	-104.5908153	0.00	
17130.00†	90.000	359.509	6995.00	10799.18	10685.75	-1563.40	40.5343452	-104.5908147	0.00	
17230.00†	90.000	359.509	6995.00	10898.35	10785.75	-1564.25	40.5346197	-104.5908141	0.00	
17330.00†	90.000	359.509	6995.00	10997.52	10885.75	-1565.11	40.5348942	-104.5908134	0.00	
17430.00†	90.000	359.509	6995.00	11096.69	10985.74	-1565.97	40.5351687	-104.5908128	0.00	

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)**		

WELLPATH DATA (184 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
17530.00†	90.000	359.509	6995.00	11195.87	11085.74	-1566.82	40.5354432	-104.5908122	0.00	
17630.00†	90.000	359.509	6995.00	11295.04	11185.73	-1567.68	40.5357177	-104.5908116	0.00	
17730.00†	90.000	359.509	6995.00	11394.21	11285.73	-1568.54	40.5359921	-104.5908110	0.00	
17789.45	90.000	359.509	6995.00[2]	11453.16	11345.17	-1569.05	40.5361553	-104.5908107	0.00	BHL

HOLE & CASING SECTIONS - Ref Wellbore: BISHOP A06-740 PWB Ref Wellpath: BISHOP A06-740 (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

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	1.00	149.74	106.08	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.06-T06N-R64W	N/A	19.00	168.18	-4146.28	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.31-T07N-R64W	N/A	19.00	168.18	-4146.28	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
BISHOP A06-740 BHL Rev-1 (200'FSL & 2063'FEL,SEC.31)	N/A	6973.00	11345.17	-1569.05	**3252705.65**	**1439457.65**	40.5361553	-104.5908107	point
BISHOP A06-740 LP Rev-1 (200'FSL & 2003'FEL,SEC.06)	N/A	6973.00	1176.16	-1481.92	**3252792.77**	**1429288.99**	40.5082420	-104.5908723	point
2) BISHOP A06-740 BHL Rev-2 (200'FSL & 2063'FEL,SEC.31)	17789.45	6995.00	11345.17	-1569.05	**3252705.65**	**1439457.65**	40.5361553	-104.5908107	point
1) BISHOP A06-740 LP Rev-2 (200'FSL & 2003'FEL,SEC.06)	7620.06	6995.00	1176.16	-1481.92	**3252792.77**	**1429288.99**	40.5082420	-104.5908723	point
DP 136 Hardlines (200'FNL/FSL & 300'FEL/FWL)	N/A	7002.00	149.94	89.95	3254364.58	1428262.81	40.5053810	-104.5852580	polygon
	2D Polygon: dimensions not calculated								

REFERENCE WELLPATH IDENTIFICATION			
Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)**		

SURVEY PROGRAM - Ref Wellbore: BISHOP A06-740 PWB Ref Wellpath: BISHOP A06-740 (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 A06-740 PWB
1950.00	17789.45	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-740 PWB

Planned Wellpath Report

BISHOP A06-740 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)**		

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	292.730	30.00	SHL
2000.00	0.000	292.730	2000.00	End of Tangent
2979.43	19.589	292.730	2960.46	Build (XS)
6704.46	19.589	292.730	6469.90	KOP
7620.06	90.000	359.509	6995.00	LP/TPZ
17789.45	90.000	359.509	6995.00	BHL

Closest Approach Clearance Summary Report

BISHOP A06-740 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'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 **11:07:11 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	-149.74	-106.08	3254274.64	1428112.87	**40°30'17.8992"N**	**104°35'8.1132"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 (4743'GL+30'KB@4773'RKB) (RKB) to Facility Vertical Datum	**4773.00ft**
Horizontal Reference Pt	**Slot**	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Mean Sea Level	**4773.00ft**
Vertical Reference Pt	**RIG (4743'GL+30'KB@4773'RKB) (RKB)**	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Ground Level at Slot (SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07))	**4773.00ft**
MD Reference Pt	**RIG (4743'GL+30'KB@4773'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 A06-740 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'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 A06-740 PWB Ref Wellpath: BISHOP A06-740 (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 A06-740 PWB Ref Wellpath: BISHOP A06-740 (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 A06-740 PWB
1950.00	17789.45	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-740 PWB

Closest Approach Clearance Summary Report

BISHOP A06-740 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)**		

CALCULATION RANGE & CUTOFF

From: **30.00ft MD** | To: **17789.45ft 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#14 UYEMURA #34-31 (05-123-21921)	UYEMURA #34-31	UYEMURA #34-31 AWB	UYEMURA #34-31 AWP	Drilling	13280.95	55.05	13280.95	13280.95	0.01	13280.95	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	14505.10	75.22	14505.10	14505.10	0.01	14505.10	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	12107.90	95.95	12107.90	12107.90	0.01	12107.90	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	9455.89	239.46	9455.89	9455.89	0.03	9455.89	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	7896.71	303.28	7896.71	7896.71	0.04	7896.71	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	7974.66	1017.70	7974.66	7974.66	0.12	7974.66	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	9377.23	1053.37	9377.23	9377.25	0.12	9377.25	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	13585.23	1166.57	13585.23	13585.24	0.14	13585.24	FAIL
SEC.31-T07N-R64W	SLOT#02 PFENNING #43-31 (05-123-22378)	PFENNING #43-31	PFENNING #43-31 AWB	PFENNING #43-31 AWP	Drilling	14517.91	1173.29	14517.91	14517.91	0.14	14517.91	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	7176.07	1425.07	7176.07	7268.83	0.17	7268.83	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	9243.18	1538.35	9243.18	9243.19	0.18	9243.19	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	8241.31	1545.66	8241.31	8241.32	0.18	8241.32	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	16509.02	1818.68	16509.02	16509.17	0.21	16509.17	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	4534.21	1562.53	4534.21	6770.89	0.22	6770.89	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	1065.80	2000.00	6377.05	0.23	6377.05	FAIL
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	17479.87	92.97	17479.87	17481.60	0.27	17481.60	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	13320.77	2324.80	13320.77	13320.91	0.27	13320.91	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	7261.51	2554.07	7261.51	7396.66	0.30	7396.66	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	6773.50	2722.75	6773.50	7013.25	0.34	7013.25	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	3250.05	2547.28	3250.05	6862.65	0.35	6862.65	FAIL
SEC.07-T06N-R64W	SLOT#42 EHRLICH #4 (05-123-12738)	EHRLICH #4 (05-123-12738)	EHRLICH #4 AWB	EHRLICH #4 AWP	Drilling	6902.70	2986.72	6902.70	7161.07	0.36	7161.07	FAIL
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	15831.28	110.49	15831.28	15833.67	0.37	15833.67	FAIL
SEC.07-T06N-R64W	SLOT#32 EHRLICH #3 (05-123-12737)	EHRLICH #3 (05-123-12737)	EHRLICH #3 AWB	EHRLICH #3 AWP	Drilling	6711.47	3203.55	6711.47	6981.23	0.40	6981.23	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	11329.16	47.64	11329.16	11300.98	0.48	11300.98	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	30.00	22.53	17789.45	2117.55	1.00	17789.45	WARN

Closest Approach Clearance Summary Report

BISHOP A06-740 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)**		

CALCULATION RANGE & CUTOFF

From: **30.00ft MD**	To: **17789.45ft 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	7359.58	86.14	7359.58	7359.64	1.27	7359.64	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	10916.49	173.38	10916.49	10906.91	1.78	10906.91	PASS
SEC.07-T06N-R64W	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)	BISHOP A06-722	BISHOP A06-722 PWB	BISHOP A06-722 (REV-C.0) PWP	Planned	2000.76	45.05	17789.45	2002.95	2.27	17789.45	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	17780.08	615.08	17780.08	17785.37	2.63	17785.37	PASS
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	16672.77	906.59	16672.77	16670.25	3.25	16670.25	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	15836.62	1062.87	15836.62	15875.23	3.45	15875.23	PASS
SEC.07-T06N-R64W	SLOT#33 KREPS #1 (05-123-12736)	KREPS #1 (05-123-12736)	KREPS #1 AWB	KREPS #1 AWP	Drilling	6605.10	202.03	6605.10	6655.62	3.66	6655.62	PASS
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	15894.09	1463.07	15894.09	15903.92	4.47	15903.92	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	17770.80	1222.50	17770.80	17789.45	5.22	17789.45	PASS
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	17524.91	1528.88	17524.91	17540.84	5.31	17540.84	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	2033.53	127.72	2033.53	2042.20	6.75	2042.20	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	67.58	17789.45	940.97	7.19	17789.45	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	15976.52	2417.98	15976.52	16107.77	7.35	16107.77	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	17255.32	2397.77	17255.32	17412.58	7.79	17412.58	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	17761.52	1834.33	17761.52	17789.45	7.85	17789.45	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	151.68	7030.00	7035.82	8.25	7035.82	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	1682.08	151.14	1682.08	1950.00	8.84	1950.00	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	3292.86	245.92	3292.86	3460.34	9.29	3460.34	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	13290.75	1178.11	13290.75	13443.24	9.62	13443.24	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	30.00	187.62	2000.00	2049.81	10.10	2049.81	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	90.10	17789.45	17789.45	10.46	17789.45	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	17752.23	2444.84	17752.23	17789.45	10.49	17789.45	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	10522.13	999.62	10522.13	10658.53	10.70	10658.53	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	7364.72	678.08	7364.72	7345.95	11.98	7345.95	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	11833.48	1285.81	11833.48	12030.37	12.12	12030.37	PASS

Closest Approach Clearance Summary Report

BISHOP A06-740 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

REFERENCE WELLPATH IDENTIFICATION

Operator	**NOBLE ENERGY, INC**	Well	**BISHOP A06-740**
Field	**WELD COUNTY (NOBLE NAD 83 GRID)**	API/Legal	
Facility	**SEC.07-T06N-R64W**	Wellbore	**BISHOP A06-740 PWB**
Slot	**SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)**		

CALCULATION RANGE & CUTOFF

From: **30.00ft MD** | To: **17789.45ft 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#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	112.63	17789.45	17789.45	13.04	17789.45	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	174.85	630.00	1969.05	14.42	1969.05	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	135.16	17789.45	17789.45	15.49	17789.45	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	157.68	17789.45	17789.45	18.20	17789.45	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	164.52	6630.00	1035.48	18.30	6930.00	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	156.85	6830.00	955.06	18.56	6930.00	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	7445.96	1249.53	7445.96	7485.25	22.01	7485.25	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	8687.78	2002.79	8687.78	9110.91	25.36	9110.91	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	10537.45	2424.07	10537.45	11132.48	25.42	11132.48	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	9200.66	2314.94	9200.66	9773.81	27.82	9773.81	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	7484.29	1826.81	7484.29	7965.44	32.71	7965.44	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	8179.68	2606.37	8179.68	8839.60	34.10	8839.60	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	7537.77	2401.20	7537.77	8546.08	41.93	8546.08	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	4016.14	2695.95	4016.14	6564.82	53.05	6564.82	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	2290.52	30.00	6911.00	59.42	6911.00	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	2540.05	2848.95	2540.05	6732.09	63.82	6732.09	PASS
SEC.07-T06N-R64W	SLOT#36 EHRLICH #1 (05-123-12382)	EHRLICH #1 (05-123-12382)	EHRLICH #1 AWB	EHRLICH #1 AWP	Drilling	6771.08	3918.21	6771.08	7208.08	68.80	7208.08	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	410.89	3893.09	2530.00	7041.71	74.02	7041.71	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	2856.51	2000.00	6911.41	75.52	6911.41	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	5502.17	4435.66	5502.17	7104.17	78.54	7104.17	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	3507.92	30.00	7053.01	78.78	7053.01	PASS
SEC.07-T06N-R64W	SLOT#44 EHRLICH #2 (05-123-12460)	EHRLICH #2 (05-123-12460)	EHRLICH #2 AWB	EHRLICH #2 AWP	Drilling	6730.00	4968.68	6730.00	7156.00	86.48	7156.00	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	2852.44	2000.00	6900.18	89.25	6900.18	PASS