

NOBLE ENERGY, INC



Location: COLORADO Slot: SLOT#13 BISHOP A18-742 (858°FNL & 529°FEL,SEC.07)

Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: BISHOP A18-742

Facility: SEC.07-T06N-R64W Wellbore: BISHOP A18-742 PWB

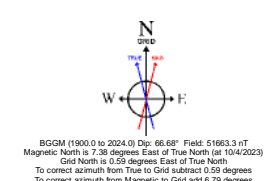
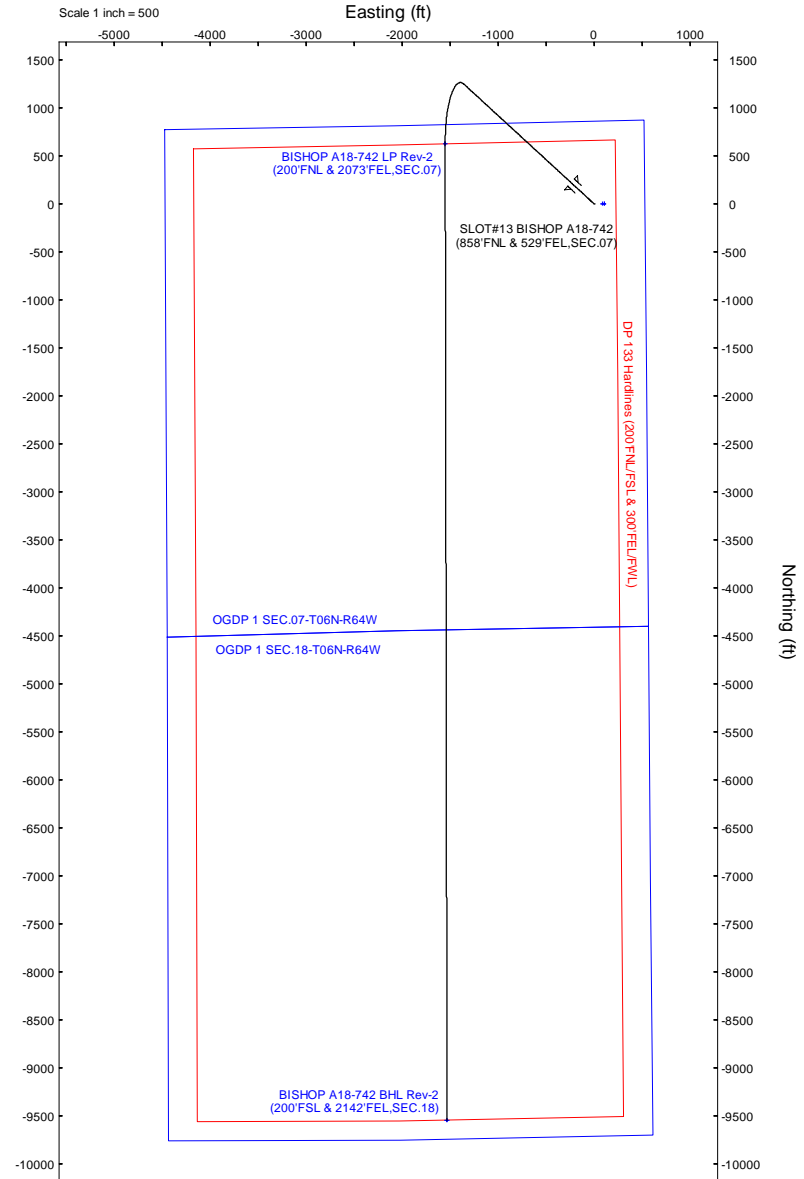
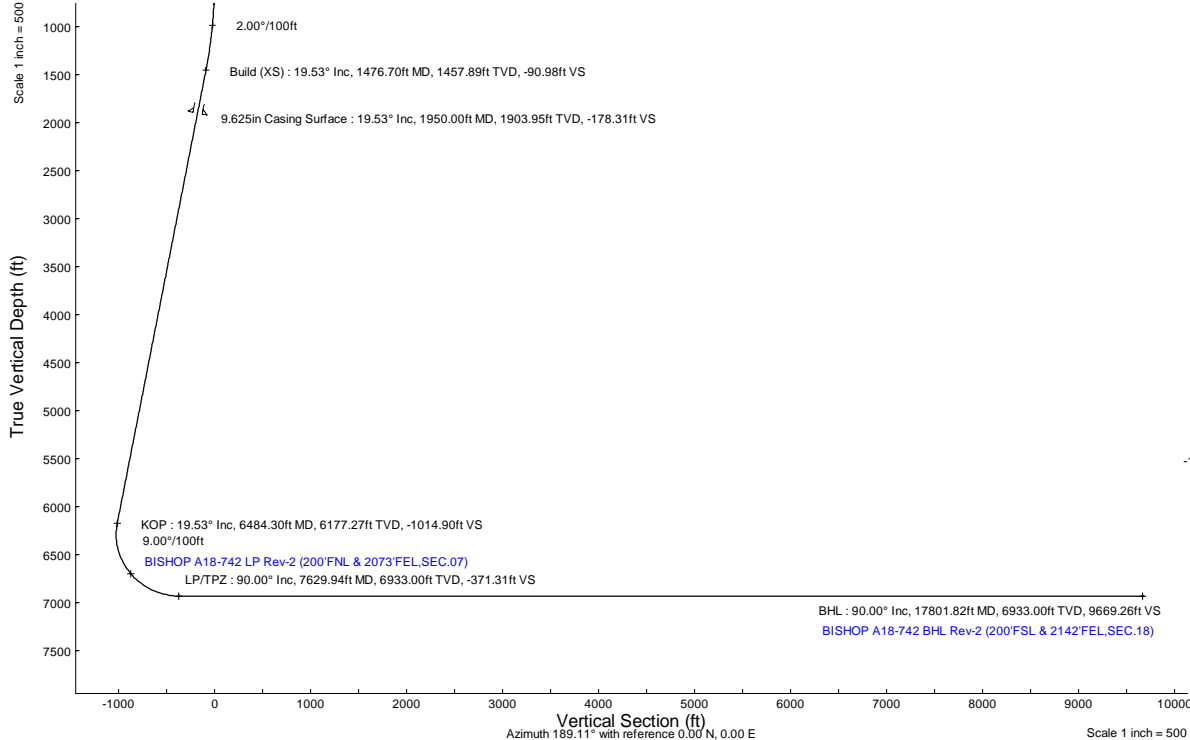
Plot reference wellpath is BISHOP A18-742 (REV-C.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (4740GL+30KB@4770RKB) (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to RIG (4740GL+30KB@4770RKB) (RKB)	Scale: True distance
RIG (4740GL+30KB@4770RKB) (RKB) to Mean Sea Level: 4770 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#13 BISHOP A18-742 (858°FNL & 529°FEL,SEC.07)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: guenaler on 2023-10-06; Database: WA_Denver

Location Information					
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude
SEC.07-T06N-R64W			3254380.716	1428262.611	40°30'19.3680"N
Slot			Grid East (US ft)	Grid North (US ft)	Latitude
SLOT#13 BISHOP A18-742 (858°FNL & 529°FEL,SEC.07)			3254274.759	1428262.976	40°30'19.3824"N
RIG (4740GL+30KB@4770RKB) (RKB) to Ground level (At Slot: SLOT#13 BISHOP A18-742 (858°FNL & 529°FEL,SEC.07))			4770ft		
Mean Sea Level to Ground level (At Slot: SLOT#13 BISHOP A18-742 (858°FNL & 529°FEL,SEC.07))			0ft		
RIG (4740GL+30KB@4770RKB) (RKB) to Mean Sea Level			4770ft		

Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)
SHL	30.00	0.000	312.596	30.00	0.00	0.00	0.00
End of Tangent	500.00	0.000	312.596	500.00	0.00	0.00	0.00
Build (XS)	1476.70	19.534	312.596	1457.89	111.60	-121.38	2.00
KOP	6484.30	19.534	312.596	6177.27	1244.86	-1353.96	0.00
LP/TPZ	7629.94	90.000	179.890	6933.00	624.45	-1549.80	9.00
BHL	17801.82	90.000	179.890	6933.00	-9547.40	-1530.25	0.00

Targets							
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
OGDP 1 SEC.07-T06N-R64W	N/A	-2.00	-0.36	105.96	3254380.72	1428262.61	40°30'19.3680"N
OGDP 1 SEC.18-T06N-R64W	N/A	-2.00	-0.36	105.96	3254380.72	1428262.61	40°30'19.3680"N
BISHOP A18-742 BHL Rev-1 (200°FNL & 2142°FEL,SEC.18)	N/A	6860.00	-9547.40	-1530.25	3252744.56	1418715.91	40°30'25.7100"N
BISHOP A18-742 LP Rev-1 (200°FNL & 2073°FEL,SEC.07)	N/A	6860.00	624.45	-1549.80	3252725.01	1428867.41	40°30'25.7100"N
BISHOP A18-742 BHL Rev-2 (200°FNL & 2142°FEL,SEC.18)	17801.82	6933.00	-9547.40	-1530.25	3252744.56	1418715.91	40°30'25.7100"N
BISHOP A18-742 LP Rev-2 (200°FNL & 2073°FEL,SEC.07)	7629.94	6933.00	624.45	-1549.80	3252725.01	1428867.41	40°30'25.7100"N
DP 133 Hardlines (200°FNL/FSL & 300°FEL/FWL)	N/A	6999.00	-0.17	89.83	3254364.58	1428262.61	40°30'19.3716"N

Survey Program					
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
30.00	17920.36	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		BISHOP A18-742 PWB





Planned Wellpath Report
BISHOP A18-742 (REV-C.0) PWP
Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'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	0.999967	Report Generated	10/6/2023 at 1:26:17 PM
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	0.36	-105.96	3254274.76	1428262.98	40.5053840°	-104.5855810°
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 (4740'GL+30'KB@4770'RKB) (RKB) to Facility Vertical Datum	4770.00ft
Horizontal Reference Pt	Slot	RIG (4740'GL+30'KB@4770'RKB) (RKB) to Mean Sea Level	4770.00ft
Vertical Reference Pt	RIG (4740'GL+30'KB@4770'RKB) (RKB)	RIG (4740'GL+30'KB@4770'RKB) (RKB) to Ground Level at Slot (SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07))	4770.00ft
MD Reference Pt	RIG (4740'GL+30'KB@4770'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	189.11°



Planned Wellpath Report
BISHOP A18-742 (REV-C.0) PWP
Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'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	312.596	0.00	0.00	0.00	0.00	40.5053840	-104.5855810	0.00	
30.00	0.000	312.596	30.00	0.00	0.00	0.00	40.5053840	-104.5855810	0.00	SHL
130.00†	0.000	312.596	130.00	0.00	0.00	0.00	40.5053840	-104.5855810	0.00	
230.00†	0.000	312.596	230.00	0.00	0.00	0.00	40.5053840	-104.5855810	0.00	
330.00†	0.000	312.596	330.00	0.00	0.00	0.00	40.5053840	-104.5855810	0.00	
430.00†	0.000	312.596	430.00	0.00	0.00	0.00	40.5053840	-104.5855810	0.00	
500.00	0.000	312.596	500.00	0.00	0.00	0.00	40.5053840	-104.5855810	0.00	End of Tangent
530.00†	0.600	312.596	530.00	-0.09	0.11	-0.12	40.5053843	-104.5855814	2.00	
630.00†	2.600	312.596	629.96	-1.63	2.00	-2.17	40.5053895	-104.5855887	2.00	
730.00†	4.600	312.596	729.75	-5.09	6.25	-6.79	40.5054013	-104.5856052	2.00	
830.00†	6.600	312.596	829.27	-10.48	12.85	-13.98	40.5054197	-104.5856308	2.00	
930.00†	8.600	312.596	928.39	-17.77	21.80	-23.71	40.5054445	-104.5856655	2.00	
1030.00†	10.600	312.596	1026.98	-26.98	33.09	-35.99	40.5054758	-104.5857092	2.00	
1130.00†	12.600	312.596	1124.93	-38.07	46.70	-50.79	40.5055136	-104.5857619	2.00	
1230.00†	14.600	312.596	1222.13	-51.04	62.61	-68.10	40.5055578	-104.5858235	2.00	
1330.00†	16.600	312.596	1318.44	-65.88	80.81	-87.89	40.5056083	-104.5858941	2.00	
1430.00†	18.600	312.596	1413.75	-82.57	101.28	-110.15	40.5056651	-104.5859733	2.00	
1476.70	19.534	312.596	1457.89	-90.98	111.60	-121.38	40.5056937	-104.5860133	2.00	Build (XS)
1530.00†	19.534	312.596	1508.12	-100.82	123.66	-134.50	40.5057272	-104.5860601	0.00	
1630.00†	19.534	312.596	1602.37	-119.27	146.29	-159.11	40.5057900	-104.5861477	0.00	
1730.00†	19.534	312.596	1696.61	-137.72	168.92	-183.73	40.5058528	-104.5862354	0.00	
1830.00†	19.534	312.596	1790.85	-156.17	191.56	-208.34	40.5059157	-104.5863231	0.00	
1930.00†	19.534	312.596	1885.10	-174.62	214.19	-232.96	40.5059785	-104.5864107	0.00	
2030.00†	19.534	312.596	1979.34	-193.07	236.82	-257.57	40.5060413	-104.5864984	0.00	
2130.00†	19.534	312.596	2073.59	-211.52	259.45	-282.19	40.5061041	-104.5865861	0.00	
2230.00†	19.534	312.596	2167.83	-229.97	282.08	-306.80	40.5061669	-104.5866737	0.00	
2330.00†	19.534	312.596	2262.08	-248.42	304.71	-331.41	40.5062297	-104.5867614	0.00	
2430.00†	19.534	312.596	2356.32	-266.87	327.34	-356.03	40.5062925	-104.5868491	0.00	
2530.00†	19.534	312.596	2450.56	-285.32	349.97	-380.64	40.5063553	-104.5869368	0.00	
2630.00†	19.534	312.596	2544.81	-303.77	372.60	-405.26	40.5064181	-104.5870244	0.00	
2730.00†	19.534	312.596	2639.05	-322.22	395.23	-429.87	40.5064810	-104.5871121	0.00	
2830.00†	19.534	312.596	2733.30	-340.67	417.86	-454.49	40.5065438	-104.5871998	0.00	
2930.00†	19.534	312.596	2827.54	-359.12	440.49	-479.10	40.5066066	-104.5872874	0.00	
3030.00†	19.534	312.596	2921.79	-377.57	463.13	-503.71	40.5066694	-104.5873751	0.00	
3130.00†	19.534	312.596	3016.03	-396.02	485.76	-528.33	40.5067322	-104.5874628	0.00	
3230.00†	19.534	312.596	3110.27	-414.47	508.39	-552.94	40.5067950	-104.5875505	0.00	
3330.00†	19.534	312.596	3204.52	-432.92	531.02	-577.56	40.5068578	-104.5876381	0.00	
3430.00†	19.534	312.596	3298.76	-451.37	553.65	-602.17	40.5069206	-104.5877258	0.00	
3530.00†	19.534	312.596	3393.01	-469.82	576.28	-626.78	40.5069834	-104.5878135	0.00	
3630.00†	19.534	312.596	3487.25	-488.27	598.91	-651.40	40.5070462	-104.5879012	0.00	
3730.00†	19.534	312.596	3581.50	-506.72	621.54	-676.01	40.5071091	-104.5879888	0.00	
3830.00†	19.534	312.596	3675.74	-525.17	644.17	-700.63	40.5071719	-104.5880765	0.00	
3930.00†	19.534	312.596	3769.98	-543.62	666.80	-725.24	40.5072347	-104.5881642	0.00	
4030.00†	19.534	312.596	3864.23	-562.07	689.43	-749.86	40.5072975	-104.5882518	0.00	
4130.00†	19.534	312.596	3958.47	-580.52	712.06	-774.47	40.5073603	-104.5883395	0.00	



Planned Wellpath Report
BISHOP A18-742 (REV-C.0) PWP
Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'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†	19.534	312.596	4052.72	-598.97	734.70	-799.08	40.5074231	-104.5884272	0.00	
4330.00†	19.534	312.596	4146.96	-617.42	757.33	-823.70	40.5074859	-104.5885149	0.00	
4430.00†	19.534	312.596	4241.20	-635.87	779.96	-848.31	40.5075487	-104.5886025	0.00	
4530.00†	19.534	312.596	4335.45	-654.32	802.59	-872.93	40.5076115	-104.5886902	0.00	
4630.00†	19.534	312.596	4429.69	-672.77	825.22	-897.54	40.5076743	-104.5887779	0.00	
4730.00†	19.534	312.596	4523.94	-691.22	847.85	-922.16	40.5077372	-104.5888656	0.00	
4830.00†	19.534	312.596	4618.18	-709.68	870.48	-946.77	40.5078000	-104.5889532	0.00	
4930.00†	19.534	312.596	4712.43	-728.13	893.11	-971.38	40.5078628	-104.5890409	0.00	
5030.00†	19.534	312.596	4806.67	-746.58	915.74	-996.00	40.5079256	-104.5891286	0.00	
5130.00†	19.534	312.596	4900.91	-765.03	938.37	-1020.61	40.5079884	-104.5892163	0.00	
5230.00†	19.534	312.596	4995.16	-783.48	961.00	-1045.23	40.5080512	-104.5893039	0.00	
5330.00†	19.534	312.596	5089.40	-801.93	983.64	-1069.84	40.5081140	-104.5893916	0.00	
5430.00†	19.534	312.596	5183.65	-820.38	1006.27	-1094.45	40.5081768	-104.5894793	0.00	
5530.00†	19.534	312.596	5277.89	-838.83	1028.90	-1119.07	40.5082396	-104.5895670	0.00	
5630.00†	19.534	312.596	5372.14	-857.28	1051.53	-1143.68	40.5083024	-104.5896546	0.00	
5730.00†	19.534	312.596	5466.38	-875.73	1074.16	-1168.30	40.5083652	-104.5897423	0.00	
5830.00†	19.534	312.596	5560.62	-894.18	1096.79	-1192.91	40.5084280	-104.5898300	0.00	
5930.00†	19.534	312.596	5654.87	-912.63	1119.42	-1217.53	40.5084909	-104.5899177	0.00	
6030.00†	19.534	312.596	5749.11	-931.08	1142.05	-1242.14	40.5085537	-104.5900053	0.00	
6130.00†	19.534	312.596	5843.36	-949.53	1164.68	-1266.75	40.5086165	-104.5900930	0.00	
6230.00†	19.534	312.596	5937.60	-967.98	1187.31	-1291.37	40.5086793	-104.5901807	0.00	
6330.00†	19.534	312.596	6031.85	-986.43	1209.94	-1315.98	40.5087421	-104.5902684	0.00	
6430.00†	19.534	312.596	6126.09	-1004.88	1232.57	-1340.60	40.5088049	-104.5903561	0.00	
6484.30	19.534	312.596	6177.27	-1014.90	1244.86	-1353.96	40.5088390	-104.5904037	0.00	KOP
6530.00†	17.108	301.996	6220.66	-1021.73	1253.60	-1365.29	40.5088633	-104.5904441	9.00	
6630.00†	14.612	269.870	6317.03	-1025.43	1261.38	-1390.43	40.5088854	-104.5905342	9.00	
6730.00†	17.113	237.754	6413.39	-1013.67	1253.49	-1415.54	40.5088644	-104.5906248	9.00	
6830.00†	23.035	217.709	6507.39	-986.71	1230.11	-1440.00	40.5088009	-104.5907136	9.00	
6930.00†	30.441	206.226	6596.69	-945.24	1191.83	-1463.21	40.5086965	-104.5907985	9.00	
7030.00†	38.482	199.035	6679.11	-890.27	1139.58	-1484.60	40.5085537	-104.5908773	9.00	
7130.00†	46.829	194.047	6752.61	-823.15	1074.66	-1503.63	40.5083761	-104.5909482	9.00	
7230.00†	55.340	190.275	6815.38	-745.54	998.66	-1519.85	40.5081679	-104.5910093	9.00	
7330.00†	63.945	187.213	6865.88	-659.35	913.46	-1532.86	40.5079344	-104.5910592	9.00	
7430.00†	72.606	184.575	6902.87	-566.71	821.14	-1542.32	40.5076813	-104.5910966	9.00	
7530.00†	81.298	182.177	6925.42	-469.88	723.99	-1548.02	40.5074148	-104.5911207	9.00	
7629.94	90.000	179.890	6933.00†	-371.31	624.45	-1549.80	40.5071417	-104.5911308	9.00	LP/TPZ
7630.00†	90.000	179.890	6933.00	-371.26	624.40	-1549.80	40.5071415	-104.5911308	0.00	
7730.00†	90.000	179.890	6933.00	-272.55	524.40	-1549.61	40.5068670	-104.5911338	0.00	
7830.00†	90.000	179.890	6933.00	-173.84	424.40	-1549.42	40.5065926	-104.5911368	0.00	
7930.00†	90.000	179.890	6933.00	-75.13	324.40	-1549.22	40.5063181	-104.5911397	0.00	
8030.00†	90.000	179.890	6933.00	23.58	224.40	-1549.03	40.5060436	-104.5911427	0.00	
8130.00†	90.000	179.890	6933.00	122.29	124.40	-1548.84	40.5057691	-104.5911457	0.00	
8230.00†	90.000	179.890	6933.00	221.00	24.40	-1548.65	40.5054947	-104.5911487	0.00	
8330.00†	90.000	179.890	6933.00	319.71	-75.60	-1548.45	40.5052202	-104.5911517	0.00	
8430.00†	90.000	179.890	6933.00	418.42	-175.60	-1548.26	40.5049457	-104.5911547	0.00	



Planned Wellpath Report
BISHOP A18-742 (REV-C.0) PWP
Page 4 of 7



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'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
8530.00†	90.000	179.890	6933.00	517.13	-275.60	-1548.07	40.5046712	-104.5911577	0.00	
8630.00†	90.000	179.890	6933.00	615.83	-375.60	-1547.88	40.5043968	-104.5911607	0.00	
8730.00†	90.000	179.890	6933.00	714.54	-475.60	-1547.69	40.5041223	-104.5911637	0.00	
8830.00†	90.000	179.890	6933.00	813.25	-575.60	-1547.49	40.5038478	-104.5911667	0.00	
8930.00†	90.000	179.890	6933.00	911.96	-675.60	-1547.30	40.5035733	-104.5911697	0.00	
9030.00†	90.000	179.890	6933.00	1010.67	-775.60	-1547.11	40.5032989	-104.5911727	0.00	
9130.00†	90.000	179.890	6933.00	1109.38	-875.60	-1546.92	40.5030244	-104.5911757	0.00	
9230.00†	90.000	179.890	6933.00	1208.09	-975.60	-1546.73	40.5027499	-104.5911787	0.00	
9330.00†	90.000	179.890	6933.00	1306.80	-1075.60	-1546.53	40.5024754	-104.5911817	0.00	
9430.00†	90.000	179.890	6933.00	1405.51	-1175.60	-1546.34	40.5022010	-104.5911847	0.00	
9530.00†	90.000	179.890	6933.00	1504.22	-1275.60	-1546.15	40.5019265	-104.5911877	0.00	
9630.00†	90.000	179.890	6933.00	1602.93	-1375.60	-1545.96	40.5016520	-104.5911907	0.00	
9730.00†	90.000	179.890	6933.00	1701.64	-1475.60	-1545.76	40.5013775	-104.5911937	0.00	
9830.00†	90.000	179.890	6933.00	1800.34	-1575.60	-1545.57	40.5011031	-104.5911966	0.00	
9930.00†	90.000	179.890	6933.00	1899.05	-1675.60	-1545.38	40.5008286	-104.5911996	0.00	
10030.00†	90.000	179.890	6933.00	1997.76	-1775.60	-1545.19	40.5005541	-104.5912026	0.00	
10130.00†	90.000	179.890	6933.00	2096.47	-1875.60	-1545.00	40.5002796	-104.5912056	0.00	
10230.00†	90.000	179.890	6933.00	2195.18	-1975.60	-1544.80	40.5000052	-104.5912086	0.00	
10330.00†	90.000	179.890	6933.00	2293.89	-2075.60	-1544.61	40.4997307	-104.5912116	0.00	
10430.00†	90.000	179.890	6933.00	2392.60	-2175.60	-1544.42	40.4994562	-104.5912146	0.00	
10530.00†	90.000	179.890	6933.00	2491.31	-2275.60	-1544.23	40.4991817	-104.5912176	0.00	
10630.00†	90.000	179.890	6933.00	2590.02	-2375.60	-1544.04	40.4989073	-104.5912206	0.00	
10730.00†	90.000	179.890	6933.00	2688.73	-2475.60	-1543.84	40.4986328	-104.5912236	0.00	
10830.00†	90.000	179.890	6933.00	2787.44	-2575.60	-1543.65	40.4983583	-104.5912266	0.00	
10930.00†	90.000	179.890	6933.00	2886.14	-2675.60	-1543.46	40.4980838	-104.5912296	0.00	
11030.00†	90.000	179.890	6933.00	2984.85	-2775.60	-1543.27	40.4978093	-104.5912326	0.00	
11130.00†	90.000	179.890	6933.00	3083.56	-2875.60	-1543.07	40.4975349	-104.5912356	0.00	
11230.00†	90.000	179.890	6933.00	3182.27	-2975.60	-1542.88	40.4972604	-104.5912386	0.00	
11330.00†	90.000	179.890	6933.00	3280.98	-3075.60	-1542.69	40.4969859	-104.5912416	0.00	
11430.00†	90.000	179.890	6933.00	3379.69	-3175.60	-1542.50	40.4967114	-104.5912445	0.00	
11530.00†	90.000	179.890	6933.00	3478.40	-3275.60	-1542.31	40.4964370	-104.5912475	0.00	
11630.00†	90.000	179.890	6933.00	3577.11	-3375.60	-1542.11	40.4961625	-104.5912505	0.00	
11730.00†	90.000	179.890	6933.00	3675.82	-3475.60	-1541.92	40.4958880	-104.5912535	0.00	
11830.00†	90.000	179.890	6933.00	3774.53	-3575.60	-1541.73	40.4956135	-104.5912565	0.00	
11930.00†	90.000	179.890	6933.00	3873.24	-3675.59	-1541.54	40.4953391	-104.5912595	0.00	
12030.00†	90.000	179.890	6933.00	3971.95	-3775.59	-1541.35	40.4950646	-104.5912625	0.00	
12130.00†	90.000	179.890	6933.00	4070.65	-3875.59	-1541.15	40.4947901	-104.5912655	0.00	
12230.00†	90.000	179.890	6933.00	4169.36	-3975.59	-1540.96	40.4945156	-104.5912685	0.00	
12330.00†	90.000	179.890	6933.00	4268.07	-4075.59	-1540.77	40.4942412	-104.5912715	0.00	
12430.00†	90.000	179.890	6933.00	4366.78	-4175.59	-1540.58	40.4939667	-104.5912745	0.00	
12530.00†	90.000	179.890	6933.00	4465.49	-4275.59	-1540.38	40.4936922	-104.5912775	0.00	
12630.00†	90.000	179.890	6933.00	4564.20	-4375.59	-1540.19	40.4934177	-104.5912805	0.00	
12730.00†	90.000	179.890	6933.00	4662.91	-4475.59	-1540.00	40.4931433	-104.5912835	0.00	
12830.00†	90.000	179.890	6933.00	4761.62	-4575.59	-1539.81	40.4928688	-104.5912865	0.00	
12930.00†	90.000	179.890	6933.00	4860.33	-4675.59	-1539.62	40.4925943	-104.5912895	0.00	



Planned Wellpath Report
BISHOP A18-742 (REV-C.0) PWP
Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'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
13030.00†	90.000	179.890	6933.00	4959.04	-4775.59	-1539.42	40.4923198	-104.5912924	0.00	
13130.00†	90.000	179.890	6933.00	5057.75	-4875.59	-1539.23	40.4920454	-104.5912954	0.00	
13230.00†	90.000	179.890	6933.00	5156.46	-4975.59	-1539.04	40.4917709	-104.5912984	0.00	
13330.00†	90.000	179.890	6933.00	5255.16	-5075.59	-1538.85	40.4914964	-104.5913014	0.00	
13430.00†	90.000	179.890	6933.00	5353.87	-5175.59	-1538.65	40.4912219	-104.5913044	0.00	
13530.00†	90.000	179.890	6933.00	5452.58	-5275.59	-1538.46	40.4909474	-104.5913074	0.00	
13630.00†	90.000	179.890	6933.00	5551.29	-5375.59	-1538.27	40.4906730	-104.5913104	0.00	
13730.00†	90.000	179.890	6933.00	5650.00	-5475.59	-1538.08	40.4903985	-104.5913134	0.00	
13830.00†	90.000	179.890	6933.00	5748.71	-5575.59	-1537.89	40.4901240	-104.5913164	0.00	
13930.00†	90.000	179.890	6933.00	5847.42	-5675.59	-1537.69	40.4898495	-104.5913194	0.00	
14030.00†	90.000	179.890	6933.00	5946.13	-5775.59	-1537.50	40.4895751	-104.5913224	0.00	
14130.00†	90.000	179.890	6933.00	6044.84	-5875.59	-1537.31	40.4893006	-104.5913254	0.00	
14230.00†	90.000	179.890	6933.00	6143.55	-5975.59	-1537.12	40.4890261	-104.5913284	0.00	
14330.00†	90.000	179.890	6933.00	6242.26	-6075.59	-1536.93	40.4887516	-104.5913314	0.00	
14430.00†	90.000	179.890	6933.00	6340.97	-6175.59	-1536.73	40.4884772	-104.5913344	0.00	
14530.00†	90.000	179.890	6933.00	6439.67	-6275.59	-1536.54	40.4882027	-104.5913373	0.00	
14630.00†	90.000	179.890	6933.00	6538.38	-6375.59	-1536.35	40.4879282	-104.5913403	0.00	
14730.00†	90.000	179.890	6933.00	6637.09	-6475.59	-1536.16	40.4876537	-104.5913433	0.00	
14830.00†	90.000	179.890	6933.00	6735.80	-6575.59	-1535.96	40.4873793	-104.5913463	0.00	
14930.00†	90.000	179.890	6933.00	6834.51	-6675.59	-1535.77	40.4871048	-104.5913493	0.00	
15030.00†	90.000	179.890	6933.00	6933.22	-6775.59	-1535.58	40.4868303	-104.5913523	0.00	
15130.00†	90.000	179.890	6933.00	7031.93	-6875.59	-1535.39	40.4865558	-104.5913553	0.00	
15230.00†	90.000	179.890	6933.00	7130.64	-6975.59	-1535.20	40.4862813	-104.5913583	0.00	
15330.00†	90.000	179.890	6933.00	7229.35	-7075.59	-1535.00	40.4860069	-104.5913613	0.00	
15430.00†	90.000	179.890	6933.00	7328.06	-7175.59	-1534.81	40.4857324	-104.5913643	0.00	
15530.00†	90.000	179.890	6933.00	7426.77	-7275.59	-1534.62	40.4854579	-104.5913673	0.00	
15630.00†	90.000	179.890	6933.00	7525.48	-7375.59	-1534.43	40.4851834	-104.5913703	0.00	
15730.00†	90.000	179.890	6933.00	7624.18	-7475.59	-1534.24	40.4849090	-104.5913733	0.00	
15830.00†	90.000	179.890	6933.00	7722.89	-7575.59	-1534.04	40.4846345	-104.5913763	0.00	
15930.00†	90.000	179.890	6933.00	7821.60	-7675.59	-1533.85	40.4843600	-104.5913792	0.00	
16030.00†	90.000	179.890	6933.00	7920.31	-7775.59	-1533.66	40.4840855	-104.5913822	0.00	
16130.00†	90.000	179.890	6933.00	8019.02	-7875.59	-1533.47	40.4838111	-104.5913852	0.00	
16230.00†	90.000	179.890	6933.00	8117.73	-7975.59	-1533.27	40.4835366	-104.5913882	0.00	
16330.00†	90.000	179.890	6933.00	8216.44	-8075.59	-1533.08	40.4832621	-104.5913912	0.00	
16430.00†	90.000	179.890	6933.00	8315.15	-8175.59	-1532.89	40.4829876	-104.5913942	0.00	
16530.00†	90.000	179.890	6933.00	8413.86	-8275.59	-1532.70	40.4827131	-104.5913972	0.00	
16630.00†	90.000	179.890	6933.00	8512.57	-8375.59	-1532.51	40.4824387	-104.5914002	0.00	
16730.00†	90.000	179.890	6933.00	8611.28	-8475.59	-1532.31	40.4821642	-104.5914032	0.00	
16830.00†	90.000	179.890	6933.00	8709.99	-8575.59	-1532.12	40.4818897	-104.5914062	0.00	
16930.00†	90.000	179.890	6933.00	8808.69	-8675.59	-1531.93	40.4816152	-104.5914092	0.00	
17030.00†	90.000	179.890	6933.00	8907.40	-8775.59	-1531.74	40.4813408	-104.5914122	0.00	
17130.00†	90.000	179.890	6933.00	9006.11	-8875.59	-1531.55	40.4810663	-104.5914152	0.00	
17230.00†	90.000	179.890	6933.00	9104.82	-8975.59	-1531.35	40.4807918	-104.5914182	0.00	
17330.00†	90.000	179.890	6933.00	9203.53	-9075.58	-1531.16	40.4805173	-104.5914211	0.00	
17430.00†	90.000	179.890	6933.00	9302.24	-9175.58	-1530.97	40.4802429	-104.5914241	0.00	



Planned Wellpath Report

BISHOP A18-742 (REV-C.0) PWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'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
17530.00†	90.000	179.890	6933.00	9400.95	-9275.58	-1530.78	40.4799684	-104.5914271	0.00	
17630.00†	90.000	179.890	6933.00	9499.66	-9375.58	-1530.58	40.4796939	-104.5914301	0.00	
17730.00†	90.000	179.890	6933.00	9598.37	-9475.58	-1530.39	40.4794194	-104.5914331	0.00	
17795.99†	90.000	179.890	6933.00	9663.51	-9541.58	-1530.27	40.4792383	-104.5914351	0.00	
17801.82	90.000	179.890	6933.00 ²	9669.26	-9547.40	-1530.25	40.4792223	-104.5914353	0.00	BHL

HOLE & CASING SECTIONS - Ref Wellbore: BISHOP A18-742 PWB Ref Wellpath: BISHOP A18-742 (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	1903.95	0.00	0.00	218.71	-237.88

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	-0.36	105.96	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
OGDP 1 SEC.18-T06N-R64W	N/A	-2.00	-0.36	105.96	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
BISHOP A18-742 BHL Rev-1 (200'FSL & 2142'FEL,SEC.18)	N/A	6860.00	-9547.40	-1530.25	3252744.56	1418715.91	40.4792223	-104.5914353	point
BISHOP A18-742 LP Rev-1 (200'FNL & 2073'FEL,SEC.07)	N/A	6860.00	624.45	-1549.80	3252725.01	1428887.41	40.5071417	-104.5911308	point
2) BISHOP A18-742 BHL Rev-2 (200'FSL & 2142'FEL,SEC.18)	17801.82	6933.00	-9547.40	-1530.25	3252744.56	1418715.91	40.4792223	-104.5914353	point
1) BISHOP A18-742 LP Rev-2 (200'FNL & 2073'FEL,SEC.07)	7629.94	6933.00	624.45	-1549.80	3252725.01	1428887.41	40.5071417	-104.5911308	point
DP 133 Hardlines (200'FNL/FSL & 300'FEL/FWL)	N/A	6999.00	-0.17	89.83	3254364.58	1428262.81	40.5053810	-104.5852580	polygon
2D Polygon: dimensions not calculated									

SURVEY PROGRAM - Ref Wellbore: BISHOP A18-742 PWB Ref Wellpath: BISHOP A18-742 (REV-C.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	17920.36	OWSG MWD rev2 (MS+IFR1)		BISHOP A18-742 PWB



Planned Wellpath Report

BISHOP A18-742 (REV-C.0) PWP

Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	312.596	30.00	SHL
500.00	0.000	312.596	500.00	End of Tangent
1476.70	19.534	312.596	1457.89	Build (XS)
6484.30	19.534	312.596	6177.27	KOP
7629.94	90.000	179.890	6933.00	LP/TPZ
17801.82	90.000	179.890	6933.00	BHL



Closest Approach Clearance Summary Report

BISHOP A18-742 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'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	0.999967	Report Generated	10/6/2023 at 1:32:41 PM
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	0.36	-105.96	3254274.76	1428262.98	40°30'19.3824"N	104°35'8.0916"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 (4740'GL+30'KB@4770'RKB) (RKB) to Facility Vertical Datum	4770.00ft
Horizontal Reference Pt	Slot	RIG (4740'GL+30'KB@4770'RKB) (RKB) to Mean Sea Level	4770.00ft
Vertical Reference Pt	RIG (4740'GL+30'KB@4770'RKB) (RKB)	RIG (4740'GL+30'KB@4770'RKB) (RKB) to Ground Level at Slot (SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07))	4770.00ft
MD Reference Pt	RIG (4740'GL+30'KB@4770'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 A18-742 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'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 A18-742 PWB Ref Wellpath: BISHOP A18-742 (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	1903.95	0.00	0.00	218.71	-237.88

SURVEY PROGRAM - Ref Wellbore: BISHOP A18-742 PWB Ref Wellpath: BISHOP A18-742 (REV-C.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	17920.36	OWSG MWD rev2 (MS+IFR1)		BISHOP A18-742 PWB



Closest Approach Clearance Summary Report

BISHOP A18-742 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17801.82ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (88 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.18-T06N-R64W	SLOT#28 RICH FOOSE #1 (05-123-13946)	RICH FOOSE #1	RICH FOOSE #1 AWB	RICH FOOSE #1 AWP	Drilling	17345.43	43.01	17345.43	17345.43	0.00	17345.43	FAIL
SEC.18-T06N-R64W	SLOT#17 FOOSE #A18-10 (05-123-13855)	FOOSE #A18-10	FOOSE #A18-10 AWB	FOOSE #A18-10 AWP	Drilling	16092.80	137.46	16092.80	16092.80	0.02	16092.80	FAIL
SEC.18-T06N-R64W	SLOT#24 WPF III A #18-7 (05-123-26642)	WPF III A #18-7	WPF III A #18-7 AWB	WPF III A #18-7 AWP	Drilling	14674.79	142.33	14674.79	14674.79	0.02	14674.79	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	6226.16	161.45	6226.16	6262.51	0.02	6262.51	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	9580.80	308.48	9580.80	9580.80	0.04	9580.80	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	10655.45	323.00	10655.45	10655.45	0.04	10655.45	FAIL
SEC.18-T06N-R64W	SLOT#22 KERKSIEK A #18-14 (05-123-24865)	KERKSIEK A #18-14	KERKSIEK A #18-14 AWB	KERKSIEK A #18-14 AWP	Drilling	17352.80	975.97	17352.80	17352.85	0.12	17352.85	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	7099.90	1041.91	7099.90	7185.61	0.13	7185.61	FAIL
SEC.07-T06N-R64W	SLOT#32 EHRLICH #3 (05-123-12737)	EHRLICH #3 (05-123-12737)	EHRLICH #3 AWB	EHRLICH #3 AWP	Drilling	10771.03	1089.47	10771.03	10771.05	0.13	10771.05	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	9397.40	1153.23	9397.40	9397.40	0.14	9397.40	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	8005.34	1259.21	8005.34	8005.34	0.15	8005.34	FAIL
SEC.18-T06N-R64W	SLOT#20 WPF III #BC A18-6 (05-123-14329)	WPF III #BC A18-6	WPF III #BC A18-6 AWB	WPF III #BC A18-6 AWP	Drilling	14736.66	1252.73	14736.66	14736.71	0.15	14736.71	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	9992.53	1451.35	9992.53	9992.55	0.17	9992.55	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	4216.59	1261.80	4216.59	6599.76	0.19	6599.76	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	6630.00	1607.93	6630.00	6767.42	0.21	6767.42	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	6747.30	1897.26	6747.30	6931.87	0.24	6931.87	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	6279.36	1988.49	6279.36	6743.40	0.26	6743.40	FAIL
SEC.07-T06N-R64W	SLOT#42 EHRLICH #4 (05-123-12738)	EHRLICH #4 (05-123-12738)	EHRLICH #4 AWB	EHRLICH #4 AWP	Drilling	9453.07	2304.04	9453.07	9453.11	0.27	9453.11	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	8076.70	2401.58	8076.70	8076.71	0.28	8076.71	FAIL
SEC.18-T06N-R64W	SLOT#18 GOZA #1 (05-123-13598)	GOZA #1	GOZA #1 AWB	GOZA #1 AWP	Drilling	16060.05	2418.78	16060.05	16060.24	0.29	16060.24	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	6630.00	4253.31	6630.00	6987.68	0.53	6987.68	FAIL
SEC.18-T06N-R64W	SLOT#09 FOOSE PC A18-65HN (05-123-35047)	FOOSE PC A18-65HN	FOOSE PC A18-65HN AWB	FOOSE PC A18-65HN AWP	Drilling	15514.79	84.15	15514.79	15519.52	0.68	15519.52	FAIL
SEC.18-T06N-R64W	SLOT#15 WPF III #A18-2 (05-123-13195)	WPF III #A18-2	WPF III #A18-2 AWB	WPF III #A18-2 AWP	Drilling	13319.80	86.35	13319.80	13315.65	0.74	13315.65	FAIL
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	7481.28	86.14	7481.28	7480.90	1.27	7480.90	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	12030.80	120.59	12030.80	12023.50	1.28	12023.50	PASS



Closest Approach Clearance Summary Report

BISHOP A18-742 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17801.82ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (88 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.18-T06N-R64W	SLOT#30 LOG CABIN #1 (05-123-13426)	LOG CABIN #1	LOG CABIN #1 AWB	LOG CABIN #1 AWP	Drilling	17296.49	3782.17	17296.49	15220.68	1.31	17801.82	PASS
SEC.18-T06N-R64W	SLOT#19 DOUBLE BAR S #12-18 (05-123-14542)	DOUBLE BAR S #12-18	DOUBLE BAR S #12-18 AWB	DOUBLE BAR S #12-18 AWP	Drilling	16434.81	3818.63	16434.81	14192.87	1.38	17801.82	PASS
SEC.18-T06N-R64W	SLOT#27 FOOSE #2 (05-123-14425)	FOOSE #2	FOOSE #2 AWB	FOOSE #2 AWP	Drilling	17248.66	3141.57	17248.66	14117.80	1.38	17801.82	PASS
SEC.18-T06N-R64W	SLOT#21 LOG CABIN #2 (05-123-14563)	LOG CABIN #2	LOG CABIN #2 AWB	LOG CABIN #2 AWP	Drilling	17030.55	3502.80	17030.55	14276.69	1.40	17801.82	PASS
SEC.18-T06N-R64W	SLOT#25 CARLSON #A18-17 (05-123-32627)	CARLSON #A18-17	CARLSON #A18-17 AWB	CARLSON #A18-17 AWP	Drilling	14047.85	701.78	14047.85	14047.11	1.60	14047.11	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	1684.25	40.04	8130.00	1691.24	2.44	8130.00	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	22.53	500.00	782.31	2.62	17801.82	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	7639.45	584.32	7639.45	17801.82	2.78	17801.82	PASS
SEC.07-T06N-R64W	SLOT#33 KREPS #1 (05-123-12736)	KREPS #1 (05-123-12736)	KREPS #1 AWB	KREPS #1 AWP	Drilling	8066.08	205.89	8066.08	8065.44	3.12	8065.44	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	7644.44	1162.07	7644.44	17801.82	5.55	17801.82	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	500.64	45.05	500.64	17787.10	5.59	17787.10	PASS
SEC.18-T06N-R64W	SLOT#14 FOOSE #A18-23 (05-123-32666)	FOOSE #A18-23	FOOSE #A18-23 AWB	FOOSE #A18-23 AWP	Drilling	16472.39	863.25	16472.39	16473.46	5.83	16473.46	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	67.30	500.00	17801.82	8.30	17801.82	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	7645.07	1743.15	7645.07	17801.82	8.34	17801.82	PASS
SEC.18-T06N-R64W	SLOT#23 Kerksiek USX #A18-25 (05-123-32655)	Kerksiek USX #A18-25	Kerksiek USX #A18-25 AWB	Kerksiek USX #A18-25 AWP	Drilling	16704.88	1463.46	16704.88	16870.83	9.59	16870.83	PASS
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	151.90	7130.00	7130.00	9.60	7130.00	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	7427.13	684.41	7427.13	7418.70	9.91	7418.70	PASS
SEC.18-T06N-R64W	SLOT#13 WPF III #A18-3 (05-123-13196)	WPF III #A18-3	WPF III #A18-3 AWB	WPF III #A18-3 AWP	Drilling	13359.68	1168.88	13359.68	13506.95	10.31	13506.95	PASS
SEC.18-T06N-R64W	SLOT#12 FOOSE #A18-9 (05-123-13528)	FOOSE #A18-9	FOOSE #A18-9 AWB	FOOSE #A18-9 AWP	Drilling	16074.05	1580.20	16074.05	16129.19	11.02	16129.19	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	7624.82	2324.01	7624.82	17801.82	11.13	17801.82	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	89.83	7830.00	780.90	11.18	7830.00	PASS
SEC.18-T06N-R64W	SLOT#11 CARLSON #42-18 (05-123-21671)	CARLSON #42-18	CARLSON #42-18 AWB	CARLSON #42-18 AWP	Drilling	14599.83	1449.34	14599.83	14649.75	11.54	14649.75	PASS
SEC.18-T06N-R64W	SLOT#08 Foose State A17-618 (2347'FSL & 687'FEL,SEC.18)	Foose State A17-618	Foose State A17-618 PWB	Foose State A17-618 (REV-C.0) PWP	Planned	17273.38	1790.35	17273.38	17402.15	11.78	17402.15	PASS
SEC.18-T06N-R64W	SLOT#10 CARLSON #41-18 (05-123-21670)	CARLSON #41-18	CARLSON #41-18 AWB	CARLSON #41-18 AWP	Drilling	13120.50	1330.47	13120.50	13159.74	12.14	13159.74	PASS
SEC.18-T06N-R64W	SLOT#07 Foose State A17-627 (2348'FSL & 724'FEL,SEC.18)	Foose State A17-627	Foose State A17-627 PWB	Foose State A17-627 (REV-B.0) PWP	Planned	16702.87	1812.54	16702.87	16840.95	12.67	16840.95	PASS



Closest Approach Clearance Summary Report

BISHOP A18-742 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17801.82ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (88 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#40 EHRLICH #24-7 (05-123-20469)	EHRLICH #24-7 (05-123-20469)	EHRLICH #24-7 AWB	EHRLICH #24-7 AWP	Drilling	12080.70	1167.34	12080.70	12255.97	12.69	12255.97	PASS
SEC.18-T06N-R64W	SLOT#06 Foose State A17-637 (2349'FSL & 762'FEL,SEC.18)	Foose State A17-637	Foose State A17-637 PWB	Foose State A17-637 (REV-C.0) PWP	Planned	16177.16	1788.82	16177.16	16307.71	13.13	16307.71	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	112.35	8330.00	830.00	13.69	8530.00	PASS
SEC.18-T06N-R64W	SLOT#05 Foose State A17-647 (2349'FSL & 799'FEL,SEC.18)	Foose State A17-647	Foose State A17-647 PWB	Foose State A17-647 (REV-B.0) PWP	Planned	15559.05	1801.81	15559.05	15699.23	14.09	15699.23	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	12132.93	1333.53	12132.93	12176.39	14.50	12176.39	PASS
SEC.18-T06N-R64W	SLOT#29 WPF III #A18-13A (05-123-13197)	WPF III #A18-13A	WPF III #A18-13A AWB	WPF III #A18-13A AWP	Drilling	17258.44	2354.40	17258.44	17606.00	14.62	17606.00	PASS
SEC.18-T06N-R64W	SLOT#04 Foose State A17-656 (2350'FSL & 837'FEL,SEC.18)	Foose State A17-656	Foose State A17-656 PWB	Foose State A17-656 (REV-B.0) PWP	Planned	14987.63	1784.56	14987.63	15125.32	14.69	15125.32	PASS
SEC.18-T06N-R64W	SLOT#03 Foose State A17-665 (2351'FSL & 874'FEL,SEC.18)	Foose State A17-665	Foose State A17-665 PWB	Foose State A17-665 (REV-B.0) PWP	Planned	14416.85	1793.78	14416.85	14567.31	15.58	14567.31	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	30.00	134.88	9030.00	930.00	16.13	9230.00	PASS
SEC.18-T06N-R64W	SLOT#02 Foose State A17-675 (2351'FSL & 912'FEL,SEC.18)	Foose State A17-675	Foose State A17-675 PWB	Foose State A17-675 (REV-B.0) PWP	Planned	13843.87	1794.74	13843.87	13989.91	16.19	13989.91	PASS
SEC.18-T06N-R64W	SLOT#01 Foose State A17-685 (2352'FSL & 949'FEL,SEC.18)	Foose State A17-685	Foose State A17-685 PWB	Foose State A17-685 (REV-B.0) PWP	Planned	13301.64	1711.41	13301.64	13452.60	16.23	13452.60	PASS
SEC.18-T06N-R64W	SLOT#26 HELDT #12-18 (05-123-19549)	HELDT #12-18	HELDT #12-18 AWB	HELDT #12-18 AWP	Drilling	14756.72	2259.12	14756.72	15141.32	17.34	15141.32	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	30.00	157.41	9630.00	930.00	18.43	9830.00	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	10883.75	1476.24	10883.75	10958.60	18.53	10958.60	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	30.00	156.59	6930.00	930.00	18.56	7030.00	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	164.60	6830.00	1048.30	18.72	6930.00	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	7496.97	1263.05	7496.97	7484.83	18.74	7630.00	PASS
SEC.18-T06N-R64W	SLOT#16 HELDT #11-18 (05-123-20466)	HELDT #11-18	HELDT #11-18 AWB	HELDT #11-18 AWP	Drilling	13389.33	2317.61	13389.33	13836.41	20.12	13836.41	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	12207.61	1768.84	12207.61	12421.45	20.35	12421.45	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	500.38	174.84	7730.00	930.00	20.83	6930.00	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	11620.43	1763.99	11620.43	11843.74	22.03	11843.74	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	187.54	7830.00	830.00	22.95	7630.00	PASS
SEC.06-T06N-R64W	SLOT#12 Stille #12-6H (05-123-34410)	Stille #12-6H	Stille #12-6H AWB	Stille #12-6H AWP	Drilling	6730.00	3523.15	6730.00	6700.71	23.34	6700.71	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	11030.81	1757.39	11030.81	11257.53	23.60	11257.53	PASS
SEC.07-T06N-R64W	SLOT#44 EHRLICH #2 (05-123-12460)	EHRLICH #2 (05-123-12460)	EHRLICH #2 AWB	EHRLICH #2 AWP	Drilling	12131.92	2286.18	12131.92	12658.17	24.25	12658.17	PASS



Closest Approach Clearance Summary Report

BISHOP A18-742 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A18-742
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A18-742 PWB
Slot	SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17801.82ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (88 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#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	201.96	7830.00	829.80	24.92	7630.00	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	10441.42	1770.56	10441.42	10682.73	25.42	10682.73	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	217.50	7930.00	830.00	26.87	9630.00	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	7520.10	1837.80	7520.10	7495.81	27.79	7630.00	PASS
SEC.07-T06N-R64W	SLOT#36 EHRLICH #1 (05-123-12382)	EHRLICH #1 (05-123-12382)	EHRLICH #1 AWB	EHRLICH #1 AWP	Drilling	10799.49	2366.18	10799.49	11398.60	28.87	11398.60	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	6930.00	2207.34	6930.00	7075.45	29.50	7630.00	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	7174.05	2630.32	7174.05	7290.42	34.74	7630.00	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	6885.30	2727.56	6885.30	7043.81	36.55	7630.00	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	7593.34	2412.82	7593.34	7530.00	36.83	7530.00	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	6698.64	2885.40	6698.64	6857.17	38.65	7630.00	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	6630.00	3058.24	6630.00	6806.53	41.22	7630.00	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	6769.63	3669.80	6769.63	7023.81	49.13	7630.00	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	6730.00	4223.54	6730.00	6911.25	56.53	7630.00	PASS