

# NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#03 BISHOP A08-665 (861°FNL & 394°FEL,SEC.07)

Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: BISHOP A08-665

Facility: SEC.07-T06N-R64W Wellbore: BISHOP A08-665 PWB

Plot reference wellpath is BISHOP A08-665 (REV-C.0) PWP

Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

True vertical depths are referenced to RIG (4742GL+30KB@4772RKB) (RKB)

North Reference: Grid north

Reference wellpath measured depths are referenced to RIG (4742GL+30KB@4772RKB) (RKB)

Scale: True distance

RIG (4742GL+30KB@4772RKB) (RKB) to Mean Sea Level: 4772 feet

Coordinates are in feet referenced to Slot

Mean Sea Level to Ground level (At Slot: SLOT#03 BISHOP A08-665 (861°FNL & 394°FEL,SEC.07)): 0 feet

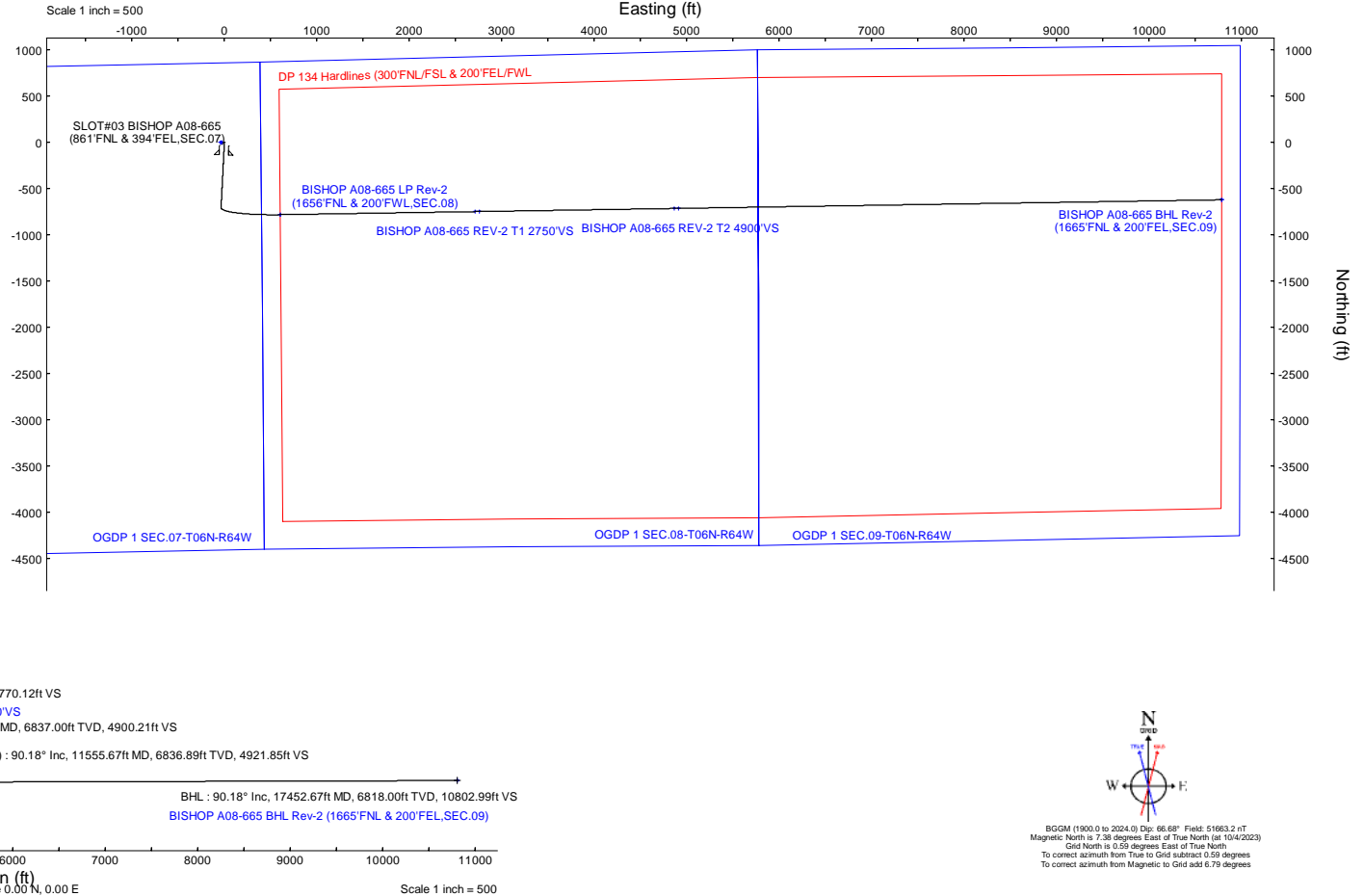
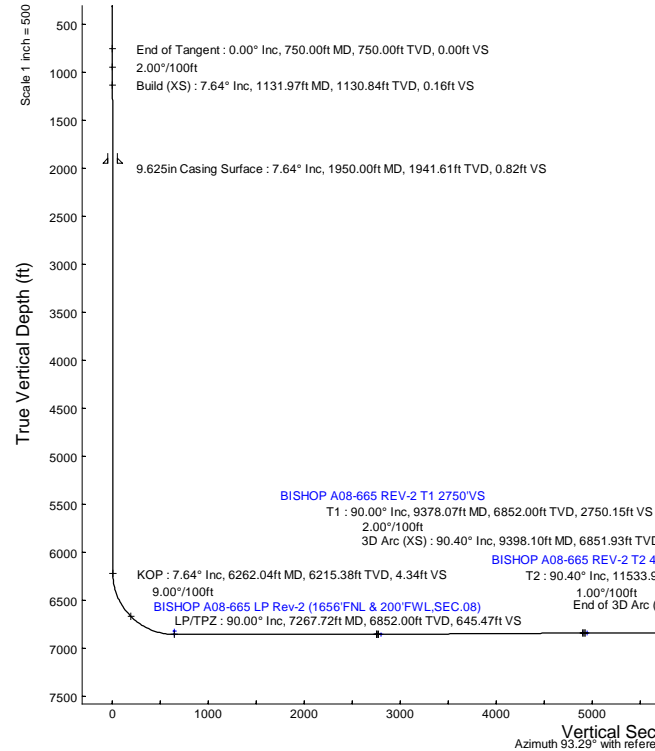
Depths are in feet

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			Local N (ft)	Local E (ft)	Latitude
SLOT#03 BISHOP A08-665 (861°FNL & 394°FEL,SEC.07)			0.30	28.92	40°30'19.3680"N
RIG (4742GL+30KB@4772RKB) (RKB) to Ground level (At Slot: SLOT#03 BISHOP A08-665 (861°FNL & 394°FEL,SEC.07))			4772ft		
Mean Sea Level to Ground level (At Slot: SLOT#03 BISHOP A08-665 (861°FNL & 394°FEL,SEC.07))			0ft		
RIG (4742GL+30KB@4772RKB) (RKB) to Mean Sea Level			4772ft		

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 A08-665 PWB
1950.00	17452.67	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		BISHOP A08-665 PWB





Planned Wellpath Report  
BISHOP A08-665 (REV-C.0) PWP  
Page 1 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'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 12:15:49 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	0.30	28.92	3254409.64	1428262.91	40.5053800°	-104.5850960°
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 (4742'GL+30'KB@4772'RKB) (RKB) to Facility Vertical Datum	4772.00ft
Horizontal Reference Pt	Slot	RIG (4742'GL+30'KB@4772'RKB) (RKB) to Mean Sea Level	4772.00ft
Vertical Reference Pt	RIG (4742'GL+30'KB@4772'RKB) (RKB)	RIG (4742'GL+30'KB@4772'RKB) (RKB) to Ground Level at Slot (SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07))	4772.00ft
MD Reference Pt	RIG (4742'GL+30'KB@4772'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	93.29°



Planned Wellpath Report  
BISHOP A08-665 (REV-C.0) PWP  
Page 2 of 9



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'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	182.941	0.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	
30.00	0.000	182.941	30.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	SHL
130.00†	0.000	182.941	130.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	
230.00†	0.000	182.941	230.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	
330.00†	0.000	182.941	330.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	
430.00†	0.000	182.941	430.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	
530.00†	0.000	182.941	530.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	
630.00†	0.000	182.941	630.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	
730.00†	0.000	182.941	730.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	
750.00	0.000	182.941	750.00	0.00	0.00	0.00	40.5053800	-104.5850960	0.00	End of Tangent
830.00†	1.600	182.941	829.99	0.01	-1.12	-0.06	40.5053769	-104.5850962	2.00	
930.00†	3.600	182.941	929.88	0.03	-5.65	-0.29	40.5053645	-104.5850973	2.00	
1030.00†	5.600	182.941	1029.55	0.08	-13.65	-0.70	40.5053425	-104.5850990	2.00	
1130.00†	7.600	182.941	1128.89	0.15	-25.13	-1.29	40.5053111	-104.5851016	2.00	
1131.97	7.639	182.941	1130.84	0.16	-25.39	-1.30	40.5053103	-104.5851016	2.00	Build (XS)
1230.00†	7.639	182.941	1228.00	0.24	-38.41	-1.97	40.5052746	-104.5851045	0.00	
1330.00†	7.639	182.941	1327.11	0.32	-51.68	-2.66	40.5052382	-104.5851075	0.00	
1430.00†	7.639	182.941	1426.22	0.40	-64.96	-3.34	40.5052018	-104.5851104	0.00	
1530.00†	7.639	182.941	1525.34	0.48	-78.24	-4.02	40.5051654	-104.5851134	0.00	
1630.00†	7.639	182.941	1624.45	0.56	-91.51	-4.70	40.5051290	-104.5851163	0.00	
1730.00†	7.639	182.941	1723.56	0.64	-104.79	-5.38	40.5050925	-104.5851192	0.00	
1830.00†	7.639	182.941	1822.67	0.73	-118.07	-6.07	40.5050561	-104.5851222	0.00	
1930.00†	7.639	182.941	1921.79	0.81	-131.34	-6.75	40.5050197	-104.5851251	0.00	
2030.00†	7.639	182.941	2020.90	0.89	-144.62	-7.43	40.5049833	-104.5851281	0.00	
2130.00†	7.639	182.941	2120.01	0.97	-157.90	-8.11	40.5049469	-104.5851310	0.00	
2230.00†	7.639	182.941	2219.12	1.05	-171.17	-8.79	40.5049104	-104.5851340	0.00	
2330.00†	7.639	182.941	2318.24	1.13	-184.45	-9.48	40.5048740	-104.5851369	0.00	
2430.00†	7.639	182.941	2417.35	1.22	-197.73	-10.16	40.5048376	-104.5851399	0.00	
2530.00†	7.639	182.941	2516.46	1.30	-211.00	-10.84	40.5048012	-104.5851428	0.00	
2630.00†	7.639	182.941	2615.57	1.38	-224.28	-11.52	40.5047647	-104.5851458	0.00	
2730.00†	7.639	182.941	2714.69	1.46	-237.55	-12.20	40.5047283	-104.5851487	0.00	
2830.00†	7.639	182.941	2813.80	1.54	-250.83	-12.89	40.5046919	-104.5851516	0.00	
2930.00†	7.639	182.941	2912.91	1.62	-264.11	-13.57	40.5046555	-104.5851546	0.00	
3030.00†	7.639	182.941	3012.02	1.71	-277.38	-14.25	40.5046191	-104.5851575	0.00	
3130.00†	7.639	182.941	3111.14	1.79	-290.66	-14.93	40.5045826	-104.5851605	0.00	
3230.00†	7.639	182.941	3210.25	1.87	-303.94	-15.61	40.5045462	-104.5851634	0.00	
3330.00†	7.639	182.941	3309.36	1.95	-317.21	-16.30	40.5045098	-104.5851664	0.00	
3430.00†	7.639	182.941	3408.47	2.03	-330.49	-16.98	40.5044734	-104.5851693	0.00	
3530.00†	7.639	182.941	3507.58	2.11	-343.77	-17.66	40.5044370	-104.5851723	0.00	
3630.00†	7.639	182.941	3606.70	2.19	-357.04	-18.34	40.5044005	-104.5851752	0.00	
3730.00†	7.639	182.941	3705.81	2.28	-370.32	-19.03	40.5043641	-104.5851781	0.00	
3830.00†	7.639	182.941	3804.92	2.36	-383.59	-19.71	40.5043277	-104.5851811	0.00	
3930.00†	7.639	182.941	3904.03	2.44	-396.87	-20.39	40.5042913	-104.5851840	0.00	
4030.00†	7.639	182.941	4003.15	2.52	-410.15	-21.07	40.5042549	-104.5851870	0.00	
4130.00†	7.639	182.941	4102.26	2.60	-423.42	-21.75	40.5042184	-104.5851899	0.00	



Planned Wellpath Report  
BISHOP A08-665 (REV-C.0) PWP  
Page 3 of 9



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'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†	7.639	182.941	4201.37	2.68	-436.70	-22.44	40.5041820	-104.5851929	0.00	
4330.00†	7.639	182.941	4300.48	2.77	-449.98	-23.12	40.5041456	-104.5851958	0.00	
4430.00†	7.639	182.941	4399.60	2.85	-463.25	-23.80	40.5041092	-104.5851988	0.00	
4530.00†	7.639	182.941	4498.71	2.93	-476.53	-24.48	40.5040728	-104.5852017	0.00	
4630.00†	7.639	182.941	4597.82	3.01	-489.81	-25.16	40.5040363	-104.5852047	0.00	
4730.00†	7.639	182.941	4696.93	3.09	-503.08	-25.85	40.5039999	-104.5852076	0.00	
4830.00†	7.639	182.941	4796.05	3.17	-516.36	-26.53	40.5039635	-104.5852105	0.00	
4930.00†	7.639	182.941	4895.16	3.26	-529.64	-27.21	40.5039271	-104.5852135	0.00	
5030.00†	7.639	182.941	4994.27	3.34	-542.91	-27.89	40.5038907	-104.5852164	0.00	
5130.00†	7.639	182.941	5093.38	3.42	-556.19	-28.57	40.5038542	-104.5852194	0.00	
5230.00†	7.639	182.941	5192.50	3.50	-569.46	-29.26	40.5038178	-104.5852223	0.00	
5330.00†	7.639	182.941	5291.61	3.58	-582.74	-29.94	40.5037814	-104.5852253	0.00	
5430.00†	7.639	182.941	5390.72	3.66	-596.02	-30.62	40.5037450	-104.5852282	0.00	
5530.00†	7.639	182.941	5489.83	3.75	-609.29	-31.30	40.5037086	-104.5852312	0.00	
5630.00†	7.639	182.941	5588.95	3.83	-622.57	-31.98	40.5036721	-104.5852341	0.00	
5730.00†	7.639	182.941	5688.06	3.91	-635.85	-32.67	40.5036357	-104.5852371	0.00	
5830.00†	7.639	182.941	5787.17	3.99	-649.12	-33.35	40.5035993	-104.5852400	0.00	
5930.00†	7.639	182.941	5886.28	4.07	-662.40	-34.03	40.5035629	-104.5852429	0.00	
6030.00†	7.639	182.941	5985.40	4.15	-675.68	-34.71	40.5035265	-104.5852459	0.00	
6130.00†	7.639	182.941	6084.51	4.23	-688.95	-35.40	40.5034900	-104.5852488	0.00	
6230.00†	7.639	182.941	6183.62	4.32	-702.23	-36.08	40.5034536	-104.5852518	0.00	
6262.04	7.639	182.941	6215.38	4.34	-706.48	-36.30	40.5034419	-104.5852527	0.00	KOP
6330.00†	9.452	142.597	6282.64	8.01	-715.44	-33.14	40.5034173	-104.5852417	9.00	
6430.00†	16.436	116.072	6380.12	26.45	-728.20	-15.40	40.5033817	-104.5851784	9.00	
6530.00†	24.738	105.979	6473.68	59.97	-740.20	17.49	40.5033479	-104.5850606	9.00	
6630.00†	33.388	100.809	6561.02	107.76	-751.15	64.73	40.5033165	-104.5848911	9.00	
6730.00†	42.172	97.589	6639.98	168.64	-760.76	125.15	40.5032884	-104.5846742	9.00	
6830.00†	51.020	95.311	6708.63	241.11	-768.81	197.28	40.5032643	-104.5844152	9.00	
6930.00†	59.902	93.543	6765.28	323.38	-775.09	279.32	40.5032447	-104.5841204	9.00	
7030.00†	68.803	92.069	6808.52	413.43	-779.46	369.27	40.5032302	-104.5837971	9.00	
7130.00†	77.716	90.764	6837.29	509.04	-781.79	464.90	40.5032210	-104.5834534	9.00	
7230.00†	86.635	89.545	6850.89	607.86	-782.05	563.87	40.5032175	-104.5830975	9.00	
7267.72	90.000	89.094	6852.00†	645.47	-781.60	601.57	40.5032177	-104.5829620	9.00	LP/TPZ
7330.00†	90.000	89.094	6852.00	707.58	-780.62	663.84	40.5032186	-104.5827380	0.00	
7430.00†	90.000	89.094	6852.00	807.31	-779.03	763.83	40.5032201	-104.5823784	0.00	
7530.00†	90.000	89.094	6852.00	907.04	-777.45	863.81	40.5032216	-104.5820188	0.00	
7630.00†	90.000	89.094	6852.00	1006.77	-775.87	963.80	40.5032231	-104.5816593	0.00	
7730.00†	90.000	89.094	6852.00	1106.51	-774.29	1063.79	40.5032246	-104.5812997	0.00	
7830.00†	90.000	89.094	6852.00	1206.24	-772.71	1163.78	40.5032261	-104.5809401	0.00	
7930.00†	90.000	89.094	6852.00	1305.97	-771.13	1263.76	40.5032276	-104.5805805	0.00	
8030.00†	90.000	89.094	6852.00	1405.70	-769.55	1363.75	40.5032291	-104.5802209	0.00	
8130.00†	90.000	89.094	6852.00	1505.43	-767.96	1463.74	40.5032306	-104.5798613	0.00	
8230.00†	90.000	89.094	6852.00	1605.16	-766.38	1563.73	40.5032321	-104.5795018	0.00	
8330.00†	90.000	89.094	6852.00	1704.89	-764.80	1663.71	40.5032336	-104.5791422	0.00	
8430.00†	90.000	89.094	6852.00	1804.63	-763.22	1763.70	40.5032351	-104.5787826	0.00	



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Page 4 of 9



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07)		

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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8530.00†	90.000	89.094	6852.00	1904.36	-761.64	1863.69	40.5032366	-104.5784230	0.00	
8630.00†	90.000	89.094	6852.00	2004.09	-760.06	1963.68	40.5032380	-104.5780634	0.00	
8730.00†	90.000	89.094	6852.00	2103.82	-758.47	2063.66	40.5032395	-104.5777038	0.00	
8830.00†	90.000	89.094	6852.00	2203.55	-756.89	2163.65	40.5032410	-104.5773443	0.00	
8930.00†	90.000	89.094	6852.00	2303.28	-755.31	2263.64	40.5032425	-104.5769847	0.00	
9030.00†	90.000	89.094	6852.00	2403.02	-753.73	2363.63	40.5032440	-104.5766251	0.00	
9130.00†	90.000	89.094	6852.00	2502.75	-752.15	2463.61	40.5032455	-104.5762655	0.00	
9230.00†	90.000	89.094	6852.00	2602.48	-750.57	2563.60	40.5032470	-104.5759059	0.00	
9330.00†	90.000	89.094	6852.00	2702.21	-748.98	2663.59	40.5032484	-104.5755464	0.00	
9378.07	90.000	89.094	6852.00 <sup>2</sup>	2750.15	-748.22	2711.65	40.5032491	-104.5753735	0.00	T1
9398.10	90.401	89.094	6851.93	2770.12	-747.91	2731.68	40.5032494	-104.5753015	2.00	3D Arc (XS)
9430.00†	90.401	89.094	6851.71	2801.94	-747.40	2763.57	40.5032499	-104.5751868	0.00	
9530.00†	90.401	89.094	6851.01	2901.67	-745.82	2863.56	40.5032514	-104.5748272	0.00	
9630.00†	90.401	89.094	6850.31	3001.40	-744.24	2963.55	40.5032529	-104.5744676	0.00	
9730.00†	90.401	89.094	6849.61	3101.13	-742.66	3063.53	40.5032543	-104.5741080	0.00	
9830.00†	90.401	89.094	6848.91	3200.86	-741.08	3163.52	40.5032558	-104.5737485	0.00	
9930.00†	90.401	89.094	6848.21	3300.59	-739.49	3263.50	40.5032573	-104.5733889	0.00	
10030.00†	90.401	89.094	6847.51	3400.32	-737.91	3363.49	40.5032588	-104.5730293	0.00	
10130.00†	90.401	89.094	6846.81	3500.05	-736.33	3463.47	40.5032602	-104.5726698	0.00	
10230.00†	90.401	89.094	6846.11	3599.77	-734.75	3563.46	40.5032617	-104.5723102	0.00	
10330.00†	90.401	89.094	6845.42	3699.50	-733.17	3663.44	40.5032632	-104.5719506	0.00	
10430.00†	90.401	89.094	6844.72	3799.23	-731.58	3763.43	40.5032647	-104.5715910	0.00	
10530.00†	90.401	89.094	6844.02	3898.96	-730.00	3863.41	40.5032661	-104.5712315	0.00	
10630.00†	90.401	89.094	6843.32	3998.69	-728.42	3963.40	40.5032676	-104.5708719	0.00	
10730.00†	90.401	89.094	6842.62	4098.42	-726.84	4063.38	40.5032691	-104.5705123	0.00	
10830.00†	90.401	89.094	6841.92	4198.15	-725.26	4163.37	40.5032705	-104.5701527	0.00	
10930.00†	90.401	89.094	6841.22	4297.88	-723.68	4263.35	40.5032720	-104.5697932	0.00	
11030.00†	90.401	89.094	6840.52	4397.61	-722.09	4363.34	40.5032734	-104.5694336	0.00	
11130.00†	90.401	89.094	6839.82	4497.34	-720.51	4463.32	40.5032749	-104.5690740	0.00	
11230.00†	90.401	89.094	6839.12	4597.07	-718.93	4563.31	40.5032764	-104.5687144	0.00	
11330.00†	90.401	89.094	6838.43	4696.79	-717.35	4663.29	40.5032778	-104.5683549	0.00	
11430.00†	90.401	89.094	6837.73	4796.52	-715.77	4763.28	40.5032793	-104.5679953	0.00	
11530.00†	90.401	89.094	6837.03	4896.25	-714.18	4863.26	40.5032807	-104.5676357	0.00	
11533.97	90.401	89.094	6837.00 <sup>3</sup>	4900.21	-714.12	4867.23	40.5032808	-104.5676214	0.00	T2
11555.67	90.184	89.094	6836.89	4921.85	-713.78	4888.93	40.5032811	-104.5675434	1.00	End of 3D Arc (XS)
11630.00†	90.184	89.094	6836.65	4995.98	-712.60	4963.25	40.5032822	-104.5672761	0.00	
11730.00†	90.184	89.094	6836.33	5095.71	-711.02	5063.23	40.5032836	-104.5669166	0.00	
11830.00†	90.184	89.094	6836.01	5195.45	-709.44	5163.22	40.5032851	-104.5665570	0.00	
11930.00†	90.184	89.094	6835.69	5295.18	-707.86	5263.21	40.5032866	-104.5661974	0.00	
12030.00†	90.184	89.094	6835.37	5394.91	-706.28	5363.20	40.5032880	-104.5658378	0.00	
12130.00†	90.184	89.094	6835.05	5494.64	-704.69	5463.18	40.5032895	-104.5654782	0.00	
12230.00†	90.184	89.094	6834.73	5594.37	-703.11	5563.17	40.5032909	-104.5651186	0.00	
12330.00†	90.184	89.094	6834.41	5694.10	-701.53	5663.16	40.5032924	-104.5647591	0.00	
12430.00†	90.184	89.094	6834.09	5793.83	-699.95	5763.14	40.5032938	-104.5643995	0.00	
12530.00†	90.184	89.094	6833.77	5893.56	-698.37	5863.13	40.5032952	-104.5640399	0.00	





Planned Wellpath Report  
BISHOP A08-665 (REV-C.0) PWP  
Page 5 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'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
12630.00†	90.184	89.094	6833.45	5993.29	-696.78	5963.12	40.5032967	-104.5636803	0.00	
12730.00†	90.184	89.094	6833.13	6093.03	-695.20	6063.10	40.5032981	-104.5633207	0.00	
12830.00†	90.184	89.094	6832.81	6192.76	-693.62	6163.09	40.5032996	-104.5629612	0.00	
12930.00†	90.184	89.094	6832.49	6292.49	-692.04	6263.08	40.5033010	-104.5626016	0.00	
13030.00†	90.184	89.094	6832.17	6392.22	-690.46	6363.07	40.5033025	-104.5622420	0.00	
13130.00†	90.184	89.094	6831.85	6491.95	-688.87	6463.05	40.5033039	-104.5618824	0.00	
13230.00†	90.184	89.094	6831.53	6591.68	-687.29	6563.04	40.5033053	-104.5615228	0.00	
13330.00†	90.184	89.094	6831.21	6691.41	-685.71	6663.03	40.5033068	-104.5611632	0.00	
13430.00†	90.184	89.094	6830.89	6791.14	-684.13	6763.01	40.5033082	-104.5608037	0.00	
13530.00†	90.184	89.094	6830.57	6890.87	-682.55	6863.00	40.5033096	-104.5604441	0.00	
13630.00†	90.184	89.094	6830.24	6990.60	-680.97	6962.99	40.5033111	-104.5600845	0.00	
13730.00†	90.184	89.094	6829.92	7090.34	-679.38	7062.97	40.5033125	-104.5597249	0.00	
13830.00†	90.184	89.094	6829.60	7190.07	-677.80	7162.96	40.5033139	-104.5593653	0.00	
13930.00†	90.184	89.094	6829.28	7289.80	-676.22	7262.95	40.5033154	-104.5590058	0.00	
14030.00†	90.184	89.094	6828.96	7389.53	-674.64	7362.93	40.5033168	-104.5586462	0.00	
14130.00†	90.184	89.094	6828.64	7489.26	-673.06	7462.92	40.5033182	-104.5582866	0.00	
14230.00†	90.184	89.094	6828.32	7588.99	-671.47	7562.91	40.5033196	-104.5579270	0.00	
14330.00†	90.184	89.094	6828.00	7688.72	-669.89	7662.90	40.5033211	-104.5575674	0.00	
14430.00†	90.184	89.094	6827.68	7788.45	-668.31	7762.88	40.5033225	-104.5572078	0.00	
14530.00†	90.184	89.094	6827.36	7888.18	-666.73	7862.87	40.5033239	-104.5568483	0.00	
14630.00†	90.184	89.094	6827.04	7987.92	-665.15	7962.86	40.5033253	-104.5564887	0.00	
14730.00†	90.184	89.094	6826.72	8087.65	-663.56	8062.84	40.5033268	-104.5561291	0.00	
14830.00†	90.184	89.094	6826.40	8187.38	-661.98	8162.83	40.5033282	-104.5557695	0.00	
14930.00†	90.184	89.094	6826.08	8287.11	-660.40	8262.82	40.5033296	-104.5554099	0.00	
15030.00†	90.184	89.094	6825.76	8386.84	-658.82	8362.80	40.5033310	-104.5550504	0.00	
15130.00†	90.184	89.094	6825.44	8486.57	-657.24	8462.79	40.5033324	-104.5546908	0.00	
15230.00†	90.184	89.094	6825.12	8586.30	-655.66	8562.78	40.5033339	-104.5543312	0.00	
15330.00†	90.184	89.094	6824.80	8686.03	-654.07	8662.77	40.5033353	-104.5539716	0.00	
15430.00†	90.184	89.094	6824.48	8785.76	-652.49	8762.75	40.5033367	-104.5536120	0.00	
15530.00†	90.184	89.094	6824.16	8885.49	-650.91	8862.74	40.5033381	-104.5532524	0.00	
15630.00†	90.184	89.094	6823.84	8985.23	-649.33	8962.73	40.5033395	-104.5528929	0.00	
15730.00†	90.184	89.094	6823.52	9084.96	-647.75	9062.71	40.5033409	-104.5525333	0.00	
15830.00†	90.184	89.094	6823.20	9184.69	-646.16	9162.70	40.5033423	-104.5521737	0.00	
15930.00†	90.184	89.094	6822.88	9284.42	-644.58	9262.69	40.5033437	-104.5518141	0.00	
16030.00†	90.184	89.094	6822.56	9384.15	-643.00	9362.67	40.5033451	-104.5514545	0.00	
16130.00†	90.184	89.094	6822.24	9483.88	-641.42	9462.66	40.5033465	-104.5510950	0.00	
16230.00†	90.184	89.094	6821.92	9583.61	-639.84	9562.65	40.5033479	-104.5507354	0.00	
16330.00†	90.184	89.094	6821.60	9683.34	-638.25	9662.64	40.5033493	-104.5503758	0.00	
16430.00†	90.184	89.094	6821.28	9783.07	-636.67	9762.62	40.5033508	-104.5500162	0.00	
16530.00†	90.184	89.094	6820.96	9882.81	-635.09	9862.61	40.5033522	-104.5496566	0.00	
16630.00†	90.184	89.094	6820.64	9982.54	-633.51	9962.60	40.5033536	-104.5492970	0.00	
16730.00†	90.184	89.094	6820.31	10082.27	-631.93	10062.58	40.5033550	-104.5489375	0.00	
16830.00†	90.184	89.094	6819.99	10182.00	-630.35	10162.57	40.5033563	-104.5485779	0.00	
16930.00†	90.184	89.094	6819.67	10281.73	-628.76	10262.56	40.5033577	-104.5482183	0.00	
17030.00†	90.184	89.094	6819.35	10381.46	-627.18	10362.54	40.5033591	-104.5478587	0.00	



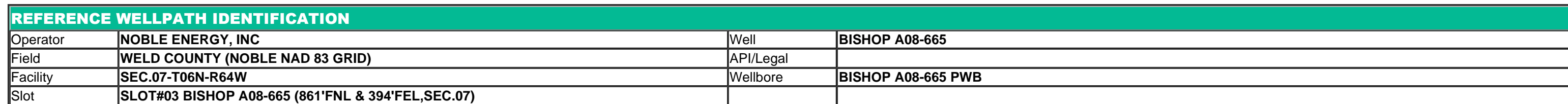
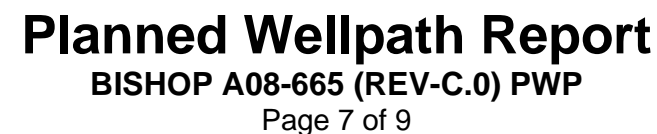
Planned Wellpath Report  
BISHOP A08-665 (REV-C.0) PWP  
Page 6 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'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
17130.00†	90.184	89.094	6819.03	10481.19	-625.60	10462.53	40.5033605	-104.5474991	0.00	
17230.00†	90.184	89.094	6818.71	10580.92	-624.02	10562.52	40.5033619	-104.5471396	0.00	
17330.00†	90.184	89.094	6818.39	10680.65	-622.44	10662.51	40.5033633	-104.5467800	0.00	
17430.00†	90.184	89.094	6818.07	10780.38	-620.85	10762.49	40.5033647	-104.5464204	0.00	
17452.67	90.184	89.094	6818.00 <sup>4</sup>	10802.99	-620.50	10785.16	40.5033650	-104.5463389	0.00	BHL

HOLE & CASING SECTIONS - Ref Wellbore: BISHOP A08-665 PWB    Ref Wellpath: BISHOP A08-665 (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	1941.61	0.00	0.00	-134.00	-6.88



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	0.00	-0.30	-28.92	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
OGDP 1 SEC.08-T06N-R64W	N/A	0.00	-0.30	-28.92	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
OGDP 1 SEC.09-T06N-R64W	N/A	0.00	-0.30	-28.92	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
BISHOP A08-665 BHL Rev-1 (1665'FSL & 200'FEL,SEC.09)	N/A	6815.00	-620.50	10785.16	3265194.41	1427642.44	40.5033650	-104.5463389	point
BISHOP A08-665 LP Rev-1 (1656'FNL & 200'FWL,SEC.08)	N/A	6815.00	-781.60	601.57	3255011.18	1427481.34	40.5032177	-104.5829620	point
4) BISHOP A08-665 BHL Rev-2 (1665'FNL & 200'FEL,SEC.09)	17452.67	6818.00	-620.50	10785.16	3265194.41	1427642.44	40.5033650	-104.5463389	point
3) BISHOP A08-665 REV-2 T2 4900'VS	11533.97	6837.00	-714.12	4867.23	3259276.69	1427548.81	40.5032808	-104.5676214	point
BISHOP A08-665 T2 4900'VS	N/A	6837.00	-713.39	4913.08	3259322.54	1427549.54	40.5032815	-104.5674565	point
1) BISHOP A08-665 LP Rev-2 (1656'FNL & 200'FWL,SEC.08)	7267.72	6852.00	-781.60	601.57	3255011.18	1427481.34	40.5032177	-104.5829620	point
2) BISHOP A08-665 REV-2 T1 2750'VS	9378.07	6852.00	-748.22	2711.65	3257121.19	1427514.71	40.5032491	-104.5753735	point
BISHOP A08-665 T1 2750'VS	N/A	6852.00	-747.50	2757.60	3257167.14	1427515.44	40.5032498	-104.5752083	point
DP 134 Hardlines (300'FNL/FSL & 200'FEL/FWL	N/A	7001.00	-0.10	-45.05	3254364.58	1428262.81	40.5053810	-104.5852580	polygon
2D Polygon: dimensions not calculated									





Planned Wellpath Report

BISHOP A08-665 (REV-C.0) PWP

Page 8 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07)		

SURVEY PROGRAM - Ref Wellbore: BISHOP A08-665 PWB    Ref Wellpath: BISHOP A08-665 (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 A08-665 PWB
1950.00	17452.67	OWSG MWD rev2 (MS+IFR1)		BISHOP A08-665 PWB



Planned Wellpath Report

BISHOP A08-665 (REV-C.0) PWP

Page 9 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	182.941	30.00	SHL
750.00	0.000	182.941	750.00	End of Tangent
1131.97	7.639	182.941	1130.84	Build (XS)
6262.04	7.639	182.941	6215.38	KOP
7267.72	90.000	89.094	6852.00	LP/TPZ
9378.07	90.000	89.094	6852.00	T1
9398.10	90.401	89.094	6851.93	3D Arc (XS)
11533.97	90.401	89.094	6837.00	T2
11555.67	90.184	89.094	6836.89	End of 3D Arc (XS)
17452.67	90.184	89.094	6818.00	BHL



Closest Approach Clearance Summary Report

BISHOP A08-665 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'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 12:16:13 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	0.30	28.92	3254409.64	1428262.91	40°30'19.3680"N	104°35'6.3456"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 (4742'GL+30'KB@4772'RKB) (RKB) to Facility Vertical Datum	4772.00ft
Horizontal Reference Pt	Slot	RIG (4742'GL+30'KB@4772'RKB) (RKB) to Mean Sea Level	4772.00ft
Vertical Reference Pt	RIG (4742'GL+30'KB@4772'RKB) (RKB)	RIG (4742'GL+30'KB@4772'RKB) (RKB) to Ground Level at Slot (SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07))	4772.00ft
MD Reference Pt	RIG (4742'GL+30'KB@4772'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 A08-665 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'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 A08-665 PWB      Ref Wellpath: BISHOP A08-665 (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	1941.61	0.00	0.00	-134.00	-6.88

SURVEY PROGRAM - Ref Wellbore: BISHOP A08-665 PWB      Ref Wellpath: BISHOP A08-665 (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 A08-665 PWB
1950.00	17452.67	OWSG MWD rev2 (MS+IFR1)		BISHOP A08-665 PWB



Closest Approach Clearance Summary Report

BISHOP A08-665 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17452.67ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (80 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.09-T06N-R64W	SLOT#18 HOWARD LAKE #12-9	HOWARD LAKE #12-9 (05-123-22344)	HOWARD LAKE #12-9 AWB	HOWARD LAKE #12-9 AWP (05-123-22344)	Drilling	12995.76	270.31	12995.76	12995.76	0.03	12995.76	FAIL
SEC.08-T06N-R64W	SLOT#15 GRADY #1 (05-123-14810)	GRADY #1 (05-123-14810)	GRADY #1 AWB	GRADY #1 AWP	Drilling	7625.98	342.12	7625.98	7625.98	0.04	7625.98	FAIL
SEC.09-T06N-R64W	SLOT#07 HOWARD LAKE #42-9	HOWARD LAKE #42-9 (05-123-23063)	HOWARD LAKE #42-9 AWB	HOWARD LAKE #42-9 AWP (05-123-23063)	Drilling	17135.90	433.77	17135.90	17135.83	0.05	17135.83	FAIL
SEC.08-T06N-R64W	SLOT#11 FRANCIS #22-8 (05-123-22515)	FRANCIS #22-8 (05-123-22515)	FRANCIS #22-8 AWB	FRANCIS #22-8 AWP	Drilling	8892.49	492.55	8892.49	8892.49	0.06	8892.49	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	6337.44	652.51	6337.44	6414.55	0.08	6414.55	FAIL
SEC.09-T06N-R64W	SLOT#05 HOWARD LAKE #11-9	HOWARD LAKE #11-9 (05-123-22890)	HOWARD LAKE #11-9 AWB	HOWARD LAKE #11-9 AWP (05-123-22890)	Drilling	12979.14	800.88	12979.14	12978.86	0.09	12978.86	FAIL
SEC.09-T06N-R64W	SLOT#02 HOWARD LAKE #41-9	HOWARD LAKE #41-9 (05-123-23074)	HOWARD LAKE #41-9 AWB	HOWARD LAKE #41-9 AWP (05-123-23074)	Drilling	17164.45	808.43	17164.45	17164.19	0.10	17164.19	FAIL
SEC.09-T06N-R64W	SLOT#03 HOWARD LAKE #21-9	HOWARD LAKE #21-9 (05-123-23073)	HOWARD LAKE #21-9 AWB	HOWARD LAKE #21-9 AWP (05-123-23073)	Drilling	14275.48	885.20	14275.48	14275.15	0.10	14275.15	FAIL
SEC.09-T06N-R64W	SLOT#01 OWL CREEK #5	OWL CREEK #5 (05-123-11930)	OWL CREEK #5 AWB	OWL CREEK #5 AWP (05-123-11930)	Drilling	16949.78	974.92	16949.78	16949.39	0.11	16949.39	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	6304.82	1471.36	6304.82	6456.91	0.19	6456.91	FAIL
SEC.08-T06N-R64W	SLOT#04 UHRICH #43-8 (05-123-21656)	UHRICH #43-8 (05-123-21656)	UHRICH #43-8 AWB	UHRICH #43-8 AWP	Drilling	11865.12	1823.66	11865.12	11863.70	0.22	11863.70	FAIL
SEC.08-T06N-R64W	SLOT#08 UHRICH #33-8 (05-123-20467)	UHRICH #33-8 (05-123-20467)	UHRICH #33-8 AWB	UHRICH #33-8 AWP	Drilling	10406.61	1826.83	10406.61	10403.32	0.22	10403.32	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	6370.23	2141.28	6370.23	6633.75	0.27	6633.75	FAIL
SEC.09-T06N-R64W	SLOT#09 HOWARD USX A #9-16	HOWARD USX A #9-16 (05-123-24493)	HOWARD USX A #9-16 AWB	HOWARD USX A #9-16 AWP (05-123-24493)	Drilling	16941.67	3081.41	16941.67	16937.96	0.36	16937.96	FAIL
SEC.08-T06N-R64W	SLOT#16 UHRICH #34-8 (05-123-14446)	UHRICH #34-8 (05-123-14446)	UHRICH #34-8 AWB	UHRICH #34-8 AWP	Drilling	10416.05	3182.16	10416.05	10405.99	0.38	10405.99	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	30.00	2953.49	750.00	6543.40	0.40	6543.40	FAIL
SEC.07-T06N-R64W	SLOT#32 EHRLICH #3 (05-123-12737)	EHRLICH #3 (05-123-12737)	EHRLICH #3 AWB	EHRLICH #3 AWP	Drilling	6319.73	3275.88	6319.73	6644.81	0.42	6644.81	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	6294.33	3262.67	6294.33	6597.69	0.42	6597.69	FAIL
SEC.07-T06N-R64W	SLOT#42 EHRLICH #4 (05-123-12738)	EHRLICH #4 (05-123-12738)	EHRLICH #4 AWB	EHRLICH #4 AWP	Drilling	6280.63	3979.92	6280.63	6628.31	0.51	6628.31	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	1216.74	4088.90	1216.74	6626.78	0.53	6626.78	FAIL
SEC.09-T06N-R64W	SLOT#17 HOWARD USX A #09-06D	HOWARD USX A #09-06D (05-123-33532)	HOWARD USX A #09-06D AWB	HOWARD USX A #09-06D AWP (05-123-33532)	Drilling	14446.88	334.37	14446.88	14372.54	0.99	14372.54	FAIL
SEC.08-T06N-R64W	SLOT#14 ERICKSON A #8-7 (05-123-23750)	ERICKSON A #8-7 (05-123-23750)	ERICKSON A #8-7 AWB	ERICKSON A #8-7 AWP	Drilling	10551.12	286.52	10551.12	10554.51	1.08	10554.51	WARN
SEC.08-T06N-R64W	SLOT#01 ERICKSON A #8-17 (05-123-23751)	ERICKSON A #8-17 (05-123-23751)	ERICKSON A #8-17 AWB	ERICKSON A #8-17 AWP	Drilling	11269.78	345.03	11269.78	11270.77	1.25	11270.77	PASS
SEC.09-T06N-R64W	SLOT#14 HOWARD USX A #09-19	HOWARD USX A #09-19 (05-123-33520)	HOWARD USX A #09-19 AWB	HOWARD USX A #09-19 AWP (05-123-33520)	Drilling	13672.20	211.52	13672.20	13671.98	1.25	13671.98	PASS
SEC.09-T06N-R64W	SLOT#08 HOWARD USX A #9-7	HOWARD USX A #9-7 (05-123-25283)	HOWARD USX A #9-7 AWB	HOWARD USX A #9-7 AWP (05-123-25283)	Drilling	15885.18	293.17	15885.18	15893.47	1.32	15893.47	PASS



Closest Approach Clearance Summary Report

BISHOP A08-665 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17452.67ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (80 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#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	1599.96	25.01	1599.96	1605.84	1.53	6430.00	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	767.06	22.51	767.06	1199.40	1.89	17452.67	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	826.60	22.50	826.60	17452.67	1.97	17452.67	PASS
SEC.08-T06N-R64W	SLOT#10 ERICKSON A #8-8 (05-123-23752)	ERICKSON A #8-8 (05-123-23752)	ERICKSON A #8-8 AWB	ERICKSON A #8-8 AWP	Drilling	11936.79	289.36	11936.79	11948.90	2.15	11948.90	PASS
SEC.08-T06N-R64W	SLOT#06 ERICKSON A #8-2 (05-123-23853)	ERICKSON A #8-2 (05-123-23853)	ERICKSON A #8-2 AWB	ERICKSON A #8-2 AWP	Drilling	10360.71	1029.71	10360.71	10378.60	3.85	10378.60	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	7264.86	1306.58	7264.86	17452.67	3.87	17452.67	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	707.19	45.05	707.19	17452.67	3.92	17452.67	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	1361.35	55.67	7530.00	1383.33	4.05	7730.00	PASS
SEC.09-T06N-R64W	SLOT#15 HOWARD USX A #09-02D	HOWARD USX A #09-02D (05-123-33521)	HOWARD USX A #09-02D AWB	HOWARD USX A #09-02D AWP (05-123-33521)	Drilling	15617.57	903.25	15617.57	15659.67	4.16	15659.67	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	2063.18	82.51	2063.18	2069.12	4.28	2069.12	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	759.83	67.43	6830.00	6889.87	4.57	6889.87	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	2048.04	105.18	2048.04	2097.95	5.40	2097.95	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	7263.60	1960.26	7263.60	17452.67	5.82	17452.67	PASS
SEC.07-T06N-R64W	SLOT#21 BISHOP A06-740 (1008'FNL & 531'FEL,SEC.07)	BISHOP A06-740	BISHOP A06-740 PWB	BISHOP A06-740 (REV-C.0) PWP	Planned	2043.11	127.72	2043.11	2051.18	6.75	2051.18	PASS
SEC.09-T06N-R64W	SLOT#13 Howard USX #A09-09D	Howard USX #A09-09D (05-123-33527)	Howard USX #A09-09D AWB	Howard USX #A09-09D AWP (05-123-33527)	Drilling	16939.91	1752.94	16939.91	17097.58	7.43	17097.58	PASS
SEC.08-T06N-R64W	SLOT#02 ERICKSON A #8-1 (05-123-23826)	ERICKSON A #8-1 (05-123-23826)	ERICKSON A #8-1 AWB	ERICKSON A #8-1 AWP	Drilling	11606.99	963.54	11606.99	11667.61	7.57	11667.61	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	1246.49	97.98	8030.00	1295.07	7.74	8330.00	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	6855.30	2611.94	7267.72	17452.67	7.78	17452.67	PASS
SEC.09-T06N-R64W	SLOT#06 HOWARD USX A #9-10	HOWARD USX A #9-10 (05-123-24495)	HOWARD USX A #9-10 AWB	HOWARD USX A #9-10 AWP (05-123-24495)	Drilling	15585.50	1645.44	15585.50	15748.72	7.94	15748.72	PASS
SEC.09-T06N-R64W	SLOT#04 HOWARD USX A #9-11	HOWARD USX A #9-11 (05-123-24496)	HOWARD USX A #9-11 AWB	HOWARD USX A #9-11 AWP (05-123-24496)	Drilling	14422.18	1500.02	14422.18	14577.30	8.18	14577.30	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	2840.19	2818.21	2840.19	17452.67	9.73	17452.67	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	1191.62	121.91	8630.00	1267.43	9.94	8830.00	PASS
SEC.09-T06N-R64W	SLOT#12 Howard USX #A09-23	Howard USX #A09-23 (05-123-33526)	Howard USX #A09-23 AWB	Howard USX #A09-23 AWP (05-123-33526)	Drilling	16522.34	2331.80	16522.34	16809.97	10.23	16809.97	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	89.83	6630.00	837.15	10.44	6730.00	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	1136.61	140.61	9230.00	1246.93	11.79	9430.00	PASS





Closest Approach Clearance Summary Report

BISHOP A08-665 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17452.67ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (80 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#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	112.35	6530.00	840.98	13.38	15530.00	PASS
SEC.09-T06N-R64W	SLOT#16 HOWARD USX A #09-12D	HOWARD USX A #09-12D (05-123-33531)	HOWARD USX A #09-12D AWB	HOWARD USX A #09-12D AWP (05-123-33531)	Drilling	13169.24	1943.13	13169.24	13450.92	13.70	13450.92	PASS
SEC.08-T06N-R64W	SLOT#03 FRANCIS #21-8 (05-123-27380)	FRANCIS #21-8 (05-123-27380)	FRANCIS #21-8 AWB	FRANCIS #21-8 AWP	Drilling	8918.28	1168.72	8918.28	9046.90	13.88	9046.90	PASS
SEC.09-T06N-R64W	SLOT#10 Howard USX #A09-15D	Howard USX #A09-15D (05-123-33522)	Howard USX #A09-15D AWB	Howard USX #A09-15D AWP (05-123-33522)	Drilling	15592.59	2987.43	15592.59	16073.02	14.07	16073.02	PASS
SEC.09-T06N-R64W	SLOT#11 Howard USX #A09-14D	Howard USX #A09-14D (05-123-33524)	Howard USX #A09-14D AWB	Howard USX #A09-14D AWP (05-123-33524)	Drilling	14457.83	2869.68	14457.83	14883.19	14.50	14883.19	PASS
SEC.07-T06N-R64W	SLOT#13 BISHOP A18-742 (858'FNL & 529'FEL,SEC.07)	BISHOP A18-742	BISHOP A18-742 PWB	BISHOP A18-742 (REV-C.0) PWP	Planned	30.00	134.88	6430.00	846.58	16.13	6630.00	PASS
SEC.08-T06N-R64W	SLOT#07 FRANCIS #11-8 (05-123-22517)	FRANCIS #11-8 (05-123-22517)	FRANCIS #11-8 AWB	FRANCIS #11-8 AWP	Drilling	763.57	949.58	7530.00	7614.81	17.21	7614.81	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	30.00	326.17	30.00	6330.00	18.31	6330.00	PASS
SEC.09-T06N-R64W	SLOT#19 HOWARD USX A #9-13	HOWARD USX A #9-13 (05-123-24494)	HOWARD USX A #9-13 AWB	HOWARD USX A #9-13 AWP (05-123-24494)	Drilling	13049.61	2995.29	13049.61	13727.20	19.15	13727.20	PASS
SEC.08-T06N-R64W	SLOT#05 FRANCEN #23-8 (05-123-21958)	FRANCEN #23-8 (05-123-21958)	FRANCEN #23-8 AWB	FRANCEN #23-8 AWP	Drilling	8921.86	1818.63	8921.86	9350.19	21.04	9350.19	PASS
SEC.08-T06N-R64W	SLOT#12 UHRICH #44-8 (05-123-14418)	UHRICH #44-8 (05-123-14418)	UHRICH #44-8 AWB	UHRICH #44-8 AWP	Drilling	11780.15	3152.50	11780.15	12621.59	22.82	12621.59	PASS
SEC.08-T06N-R64W	SLOT#09 MILE HIGH SHEEP #8-32 (05-123-23451)	MILE HIGH SHEEP #8-32 (05-123-23451)	MILE HIGH SHEEP #8-32 AWB	MILE HIGH SHEEP #8-32 AWP	Drilling	7514.97	1831.38	7514.97	7873.75	25.72	7873.75	PASS
SEC.08-T06N-R64W	SLOT#18 MILE-HI SHEEP #8-35 (05-123-24252)	MILE-HI SHEEP #8-35 (05-123-24252)	MILE-HI SHEEP #8-35 AWB	MILE-HI SHEEP #8-35 AWP	Drilling	8128.51	2316.03	8128.51	8838.47	29.58	8838.47	PASS
SEC.08-T06N-R64W	SLOT#13 FRANCEN #24-8 (05-123-14232)	FRANCEN #24-8 (05-123-14232)	FRANCEN #24-8 AWB	FRANCEN #24-8 AWP	Drilling	9244.54	3144.45	9244.54	10404.12	32.61	10404.12	PASS
SEC.07-T06N-R64W	SLOT#33 KREPS #1 (05-123-12736)	KREPS #1 (05-123-12736)	KREPS #1 AWB	KREPS #1 AWP	Drilling	643.35	1510.18	643.35	6452.88	33.90	6452.88	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	6659.08	1890.21	6659.08	6882.03	35.13	6882.03	PASS
SEC.08-T06N-R64W	SLOT#17 MILE HIGH SHEEP #8-33 (05-123-23128)	MILE HIGH SHEEP #8-33 (05-123-23128)	MILE HIGH SHEEP #8-33 AWB	MILE HIGH SHEEP #8-33 AWP	Drilling	7725.99	2794.12	7725.99	8756.27	36.97	8756.27	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	6430.00	2303.23	6430.00	6359.37	38.66	6359.37	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	6330.00	2742.05	6330.00	6421.71	47.72	6421.71	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	6410.31	2886.04	6410.31	6410.31	51.32	6410.31	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	6709.68	3149.05	6709.68	7215.28	58.03	7215.28	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	6313.81	3235.07	6313.81	6458.49	58.87	6458.49	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	6375.51	3456.34	6375.51	6460.66	64.70	6460.66	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	6430.00	3410.85	6430.00	6883.88	65.04	6883.88	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	6287.57	3724.12	6287.57	6477.78	70.66	6477.78	PASS



Closest Approach Clearance Summary Report

BISHOP A08-665 (REV-C.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A08-665
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A08-665 PWB
Slot	SLOT#03 BISHOP A08-665 (861'FNL & 394'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17452.67ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (80 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#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	6330.00	4034.56	6330.00	6530.00	77.70	6530.00	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	6368.09	4196.44	6368.09	6885.91	80.36	6885.91	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	5753.65	4214.42	5753.65	6510.49	81.71	6510.49	PASS
SEC.07-T06N-R64W	SLOT#36 EHRLICH #1 (05-123-12382)	EHRLICH #1 (05-123-12382)	EHRLICH #1 AWB	EHRLICH #1 AWP	Drilling	6288.34	4402.45	6288.34	6748.04	85.70	6748.04	PASS
SEC.07-T06N-R64W	SLOT#44 EHRLICH #2 (05-123-12460)	EHRLICH #2 (05-123-12460)	EHRLICH #2 AWB	EHRLICH #2 AWP	Drilling	6330.00	5050.14	6330.00	6887.74	96.85	6887.74	PASS