

NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#22 BISHOP A06-731 (1009FNL & 508FEL, SEC.07)

Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: BISHOP A06-731

Facility: SEC.07-T06N-R64W Wellbore: BISHOP A06-731 PWB

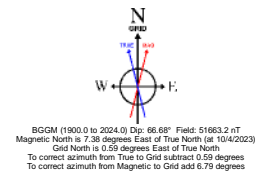
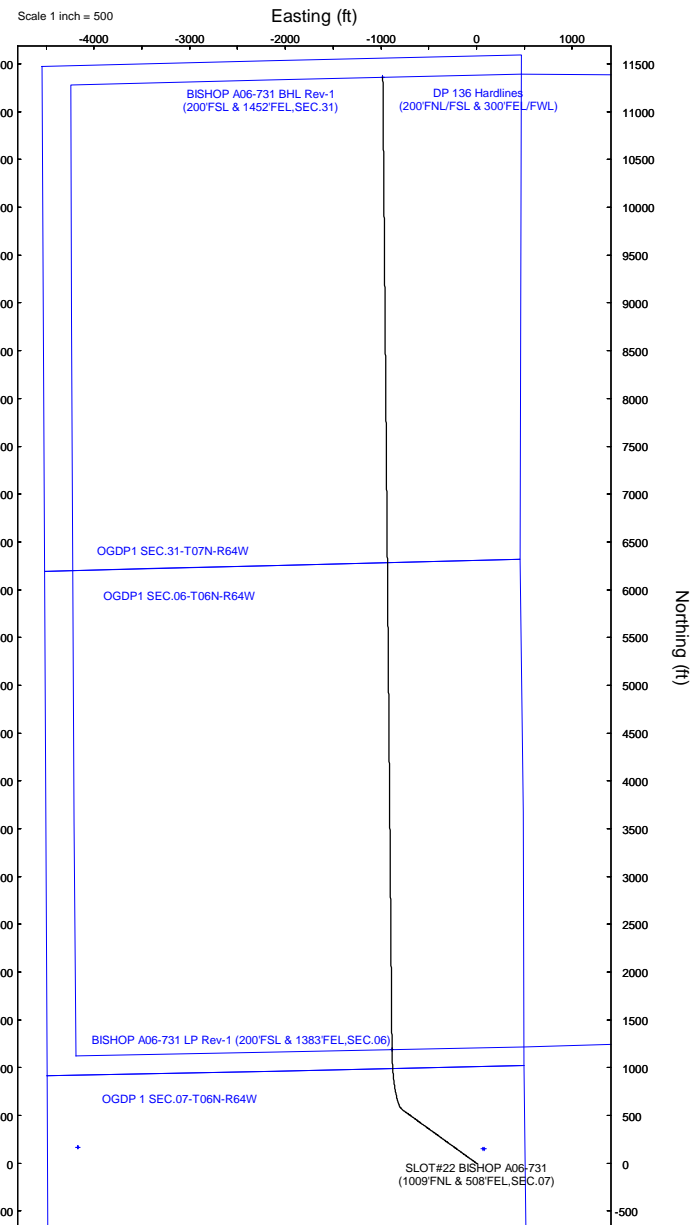
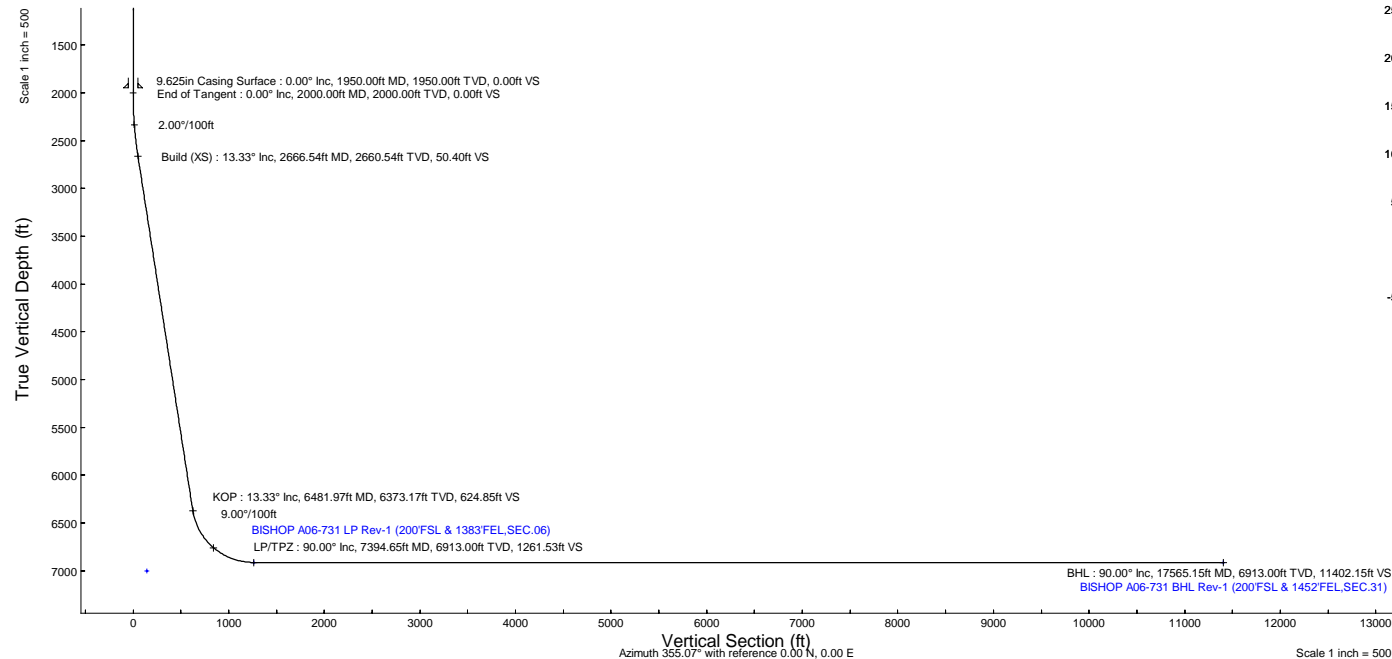
Plot reference wellpath is BISHOP A06-731 (REV-B.0) PWP		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (4743GL+30KB@4773RKB) (RKB)		North Reference: Grid north
Reference wellpath measured depths are referenced to RIG (4743GL+30KB@4773RKB) (RKB)		Scale: True distance
RIG (4743GL+30KB@4773RKB) (RKB) to Mean Sea Level: 4773 feet		Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#22 BISHOP A06-731 (1009FNL & 508FEL, SEC.07)): 0 feet		Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum		Created by: mattam01 on 2023-10-06; Database: WA_Denver

Location Information							
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.07-T06N-R64W				3254380.716	1428262.611	40°30'19.3680"N	104°35'5.7200"W
Slot		Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#22 BISHOP A06-731 (1009FNL & 508FEL, SEC.07)		-149.88	-93.55	3254297.166	1428112.741	40°30'17.8956"N	104°35'7.8216"W
RIG (4743GL+30KB@4773RKB) (RKB) to Ground level (At Slot: SLOT#22 BISHOP A06-731 (1009FNL & 508FEL, SEC.07))				4773ft			
Mean Sea Level to Ground level (At Slot: SLOT#22 BISHOP A06-731 (1009FNL & 508FEL, SEC.07))				0ft			
RIG (4743GL+30KB@4773RKB) (RKB) to Mean Sea Level				4773ft			

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
SHL	30.00	0.000	305.833	30.00	0.00	0.00	0.00	0.00
End of Tangent	2000.00	0.000	305.833	2000.00	0.00	0.00	0.00	0.00
Build (XS)	2666.54	13.331	305.833	2660.54	45.19	-62.58	2.00	50.40
KOP	6481.97	13.331	305.833	6373.17	560.21	-775.81	0.00	624.85
LP/TPZ	7394.65	90.000	359.461	6913.00	1189.86	-884.73	9.00	1261.53
BHL	17565.15	90.000	359.461	6913.00	11359.91	-980.48	0.00	11402.15

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	1.00	149.88	83.55	3254380.72	1428262.61	40°30'19.3680"N
OGDP1 SEC.06-T06N-R64W	N/A	19.00	168.31	-4168.81	3250128.51	1428281.04	40°30'19.9800"N
OGDP1 SEC.31-T07N-R64W	N/A	19.00	168.31	-4168.81	3250128.51	1428281.04	40°30'19.9800"N
BISHOP A06-731 BHL Rev-1 (200FSL & 1452FEL, SEC.31)	17565.15	6913.00	11359.91	-980.48	3253316.72	1439472.25	40°32'10.2414"N
BISHOP A06-731 LP Rev-1 (200FSL & 1383FEL, SEC.06)	7394.65	6913.00	1189.86	-884.73	3253412.46	1429302.55	40°30'29.7425"N
DP 136 Hardlines (200FNL/FSL & 300FEL/FWL)	N/A	7002.00	150.07	67.42	3254364.58	1428262.81	40°30'19.3716"N

Survey Program					
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
30.00	17565.15	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-731 PWB



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Martsam01
Scale	0.999967	Report Generated	10/6/2023 at 11:20:48 AM
Convergence at slot	0.59° East	Database	WA_Denver

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-149.88	-83.55	3254297.17	1428112.74	40.5049710°	-104.5855060°
Facility Reference Pt			3254380.72	1428262.61	40.5053800°	-104.5852000°
Field Reference Pt			3000000.00	4454105.15	48.7761986°	-105.5000000°

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Facility Vertical Datum	4773.00ft
Horizontal Reference Pt	Slot	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Mean Sea Level	4773.00ft
Vertical Reference Pt	RIG (4743'GL+30'KB@4773'RKB) (RKB)	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Ground Level at Slot (SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07))	4773.00ft
MD Reference Pt	RIG (4743'GL+30'KB@4773'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	355.07°



Planned Wellpath Report
BISHOP A06-731 (REV-B.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

WELLPATH DATA (182 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	305.833	0.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
30.00	0.000	305.833	30.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	SHL
130.00†	0.000	305.833	130.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
230.00†	0.000	305.833	230.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
330.00†	0.000	305.833	330.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
430.00†	0.000	305.833	430.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
530.00†	0.000	305.833	530.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
630.00†	0.000	305.833	630.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
730.00†	0.000	305.833	730.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
830.00†	0.000	305.833	830.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
930.00†	0.000	305.833	930.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1030.00†	0.000	305.833	1030.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1130.00†	0.000	305.833	1130.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1230.00†	0.000	305.833	1230.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1330.00†	0.000	305.833	1330.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1430.00†	0.000	305.833	1430.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1530.00†	0.000	305.833	1530.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1630.00†	0.000	305.833	1630.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1730.00†	0.000	305.833	1730.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1830.00†	0.000	305.833	1830.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
1930.00†	0.000	305.833	1930.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	
2000.00	0.000	305.833	2000.00	0.00	0.00	0.00	40.5049710	-104.5855060	0.00	End of Tangent
2030.00†	0.600	305.833	2030.00	0.10	0.09	-0.13	40.5049713	-104.5855065	2.00	
2130.00†	2.600	305.833	2129.96	1.93	1.73	-2.39	40.5049758	-104.5855145	2.00	
2230.00†	4.600	305.833	2229.75	6.03	5.40	-7.48	40.5049860	-104.5855327	2.00	
2330.00†	6.600	305.833	2329.27	12.40	11.11	-15.39	40.5050019	-104.5855609	2.00	
2430.00†	8.600	305.833	2428.39	21.03	18.86	-26.11	40.5050235	-104.5855992	2.00	
2530.00†	10.600	305.833	2526.98	31.92	28.62	-39.63	40.5050507	-104.5856475	2.00	
2630.00†	12.600	305.833	2624.93	45.05	40.39	-55.93	40.5050834	-104.5857056	2.00	
2666.54	13.331	305.833	2660.54	50.40	45.19	-62.58	40.5050968	-104.5857294	2.00	Build (XS)
2730.00†	13.331	305.833	2722.29	59.96	53.76	-74.44	40.5051207	-104.5857717	0.00	
2830.00†	13.331	305.833	2819.60	75.01	67.25	-93.14	40.5051582	-104.5858384	0.00	
2930.00†	13.331	305.833	2916.90	90.07	80.75	-111.83	40.5051958	-104.5859051	0.00	
3030.00†	13.331	305.833	3014.21	105.13	94.25	-130.52	40.5052334	-104.5859718	0.00	
3130.00†	13.331	305.833	3111.51	120.18	107.75	-149.22	40.5052710	-104.5860386	0.00	
3230.00†	13.331	305.833	3208.82	135.24	121.25	-167.91	40.5053085	-104.5861053	0.00	
3330.00†	13.331	305.833	3306.13	150.29	134.75	-186.60	40.5053461	-104.5861720	0.00	
3430.00†	13.331	305.833	3403.43	165.35	148.25	-205.30	40.5053837	-104.5862387	0.00	
3530.00†	13.331	305.833	3500.74	180.41	161.74	-223.99	40.5054213	-104.5863054	0.00	
3630.00†	13.331	305.833	3598.04	195.46	175.24	-242.68	40.5054589	-104.5863721	0.00	
3730.00†	13.331	305.833	3695.35	210.52	188.74	-261.38	40.5054964	-104.5864389	0.00	
3830.00†	13.331	305.833	3792.65	225.57	202.24	-280.07	40.5055340	-104.5865056	0.00	
3930.00†	13.331	305.833	3889.96	240.63	215.74	-298.76	40.5055716	-104.5865723	0.00	
4030.00†	13.331	305.833	3987.26	255.69	229.24	-317.45	40.5056092	-104.5866390	0.00	
4130.00†	13.331	305.833	4084.57	270.74	242.73	-336.15	40.5056467	-104.5867057	0.00	



Planned Wellpath Report

BISHOP A06-731 (REV-B.0) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

WELLPATH DATA (182 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
4230.00†	13.331	305.833	4181.87	285.80	256.23	-354.84	40.5056843	-104.5867724	0.00		
4330.00†	13.331	305.833	4279.18	300.85	269.73	-373.53	40.5057219	-104.5868392	0.00		
4430.00†	13.331	305.833	4376.49	315.91	283.23	-392.23	40.5057595	-104.5869059	0.00		
4530.00†	13.331	305.833	4473.79	330.96	296.73	-410.92	40.5057971	-104.5869726	0.00		
4630.00†	13.331	305.833	4571.10	346.02	310.23	-429.61	40.5058346	-104.5870393	0.00		
4730.00†	13.331	305.833	4668.40	361.08	323.72	-448.31	40.5058722	-104.5871060	0.00		
4830.00†	13.331	305.833	4765.71	376.13	337.22	-467.00	40.5059098	-104.5871727	0.00		
4930.00†	13.331	305.833	4863.01	391.19	350.72	-485.69	40.5059474	-104.5872395	0.00		
5030.00†	13.331	305.833	4960.32	406.24	364.22	-504.39	40.5059849	-104.5873062	0.00		
5130.00†	13.331	305.833	5057.62	421.30	377.72	-523.08	40.5060225	-104.5873729	0.00		
5230.00†	13.331	305.833	5154.93	436.36	391.22	-541.77	40.5060601	-104.5874396	0.00		
5330.00†	13.331	305.833	5252.24	451.41	404.72	-560.47	40.5060977	-104.5875063	0.00		
5430.00†	13.331	305.833	5349.54	466.47	418.21	-579.16	40.5061352	-104.5875731	0.00		
5530.00†	13.331	305.833	5446.85	481.52	431.71	-597.85	40.5061728	-104.5876398	0.00		
5630.00†	13.331	305.833	5544.15	496.58	445.21	-616.55	40.5062104	-104.5877065	0.00		
5730.00†	13.331	305.833	5641.46	511.63	458.71	-635.24	40.5062480	-104.5877732	0.00		
5830.00†	13.331	305.833	5738.76	526.69	472.21	-653.93	40.5062856	-104.5878399	0.00		
5930.00†	13.331	305.833	5836.07	541.75	485.71	-672.62	40.5063231	-104.5879066	0.00		
6030.00†	13.331	305.833	5933.37	556.80	499.20	-691.32	40.5063607	-104.5879734	0.00		
6130.00†	13.331	305.833	6030.68	571.86	512.70	-710.01	40.5063983	-104.5880401	0.00		
6230.00†	13.331	305.833	6127.98	586.91	526.20	-728.70	40.5064359	-104.5881068	0.00		
6330.00†	13.331	305.833	6225.29	601.97	539.70	-747.40	40.5064734	-104.5881735	0.00		
6430.00†	13.331	305.833	6322.60	617.03	553.20	-766.09	40.5065110	-104.5882402	0.00		
6481.97	13.331	305.833	6373.17	624.85	560.21	-775.81	40.5065305	-104.5882749	0.00	KOP	
6530.00†	16.227	318.497	6419.61	633.86	568.48	-784.75	40.5065535	-104.5883068	9.00		
6630.00†	23.664	333.650	6513.61	663.83	596.99	-802.95	40.5066323	-104.5883712	9.00		
6730.00†	31.884	341.599	6602.04	708.28	640.12	-820.23	40.5067511	-104.5884317	9.00		
6830.00†	40.411	346.511	6682.74	766.14	696.82	-836.16	40.5069072	-104.5884869	9.00		
6930.00†	49.084	349.942	6753.70	835.97	765.68	-850.35	40.5070966	-104.5885354	9.00		
7030.00†	57.834	352.569	6813.19	916.05	845.02	-862.44	40.5073147	-104.5885759	9.00		
7130.00†	66.629	354.731	6859.74	1004.41	932.87	-872.15	40.5075561	-104.5886076	9.00		
7230.00†	75.450	356.622	6892.20	1098.88	1027.08	-879.23	40.5078149	-104.5886296	9.00		
7330.00†	84.285	358.367	6909.78	1197.13	1125.33	-883.51	40.5080847	-104.5886413	9.00		
7394.65	90.000	359.461	6913.00 [†]	1261.53	1189.86	-884.73	40.5082618	-104.5886433	9.00	LP/TPZ	
7430.00†	90.000	359.461	6913.00	1296.78	1225.21	-885.07	40.5083588	-104.5886432	0.00		
7530.00†	90.000	359.461	6913.00	1396.48	1325.20	-886.01	40.5086333	-104.5886429	0.00		
7630.00†	90.000	359.461	6913.00	1496.19	1425.20	-886.95	40.5089078	-104.5886426	0.00		
7730.00†	90.000	359.461	6913.00	1595.89	1525.19	-887.89	40.5091823	-104.5886423	0.00		
7830.00†	90.000	359.461	6913.00	1695.60	1625.19	-888.83	40.5094568	-104.5886420	0.00		
7930.00†	90.000	359.461	6913.00	1795.31	1725.18	-889.77	40.5097313	-104.5886417	0.00		
8030.00†	90.000	359.461	6913.00	1895.01	1825.18	-890.72	40.5100057	-104.5886414	0.00		
8130.00†	90.000	359.461	6913.00	1994.72	1925.17	-891.66	40.5102802	-104.5886411	0.00		
8230.00†	90.000	359.461	6913.00	2094.42	2025.17	-892.60	40.5105547	-104.5886407	0.00		
8330.00†	90.000	359.461	6913.00	2194.13	2125.17	-893.54	40.5108292	-104.5886404	0.00		
8430.00†	90.000	359.461	6913.00	2293.84	2225.16	-894.48	40.5111037	-104.5886401	0.00		

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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

WELLPATH DATA (182 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
8530.00†	90.000	359.461	6913.00	2393.54	2325.16	-895.42	40.5113782	-104.5886398	0.00		
8630.00†	90.000	359.461	6913.00	2493.25	2425.15	-896.36	40.5116526	-104.5886395	0.00		
8730.00†	90.000	359.461	6913.00	2592.95	2525.15	-897.31	40.5119271	-104.5886392	0.00		
8830.00†	90.000	359.461	6913.00	2692.66	2625.14	-898.25	40.5122016	-104.5886389	0.00		
8930.00†	90.000	359.461	6913.00	2792.37	2725.14	-899.19	40.5124761	-104.5886386	0.00		
9030.00†	90.000	359.461	6913.00	2892.07	2825.13	-900.13	40.5127506	-104.5886383	0.00		
9130.00†	90.000	359.461	6913.00	2991.78	2925.13	-901.07	40.5130251	-104.5886380	0.00		
9230.00†	90.000	359.461	6913.00	3091.49	3025.13	-902.01	40.5132996	-104.5886376	0.00		
9330.00†	90.000	359.461	6913.00	3191.19	3125.12	-902.95	40.5135740	-104.5886373	0.00		
9430.00†	90.000	359.461	6913.00	3290.90	3225.12	-903.90	40.5138485	-104.5886370	0.00		
9530.00†	90.000	359.461	6913.00	3390.60	3325.11	-904.84	40.5141230	-104.5886367	0.00		
9630.00†	90.000	359.461	6913.00	3490.31	3425.11	-905.78	40.5143975	-104.5886364	0.00		
9730.00†	90.000	359.461	6913.00	3590.02	3525.10	-906.72	40.5146720	-104.5886361	0.00		
9830.00†	90.000	359.461	6913.00	3689.72	3625.10	-907.66	40.5149465	-104.5886358	0.00		
9930.00†	90.000	359.461	6913.00	3789.43	3725.10	-908.60	40.5152209	-104.5886355	0.00		
10030.00†	90.000	359.461	6913.00	3889.13	3825.09	-909.54	40.5154954	-104.5886352	0.00		
10130.00†	90.000	359.461	6913.00	3988.84	3925.09	-910.49	40.5157699	-104.5886348	0.00		
10230.00†	90.000	359.461	6913.00	4088.55	4025.08	-911.43	40.5160444	-104.5886345	0.00		
10330.00†	90.000	359.461	6913.00	4188.25	4125.08	-912.37	40.5163189	-104.5886342	0.00		
10430.00†	90.000	359.461	6913.00	4287.96	4225.07	-913.31	40.5165934	-104.5886339	0.00		
10530.00†	90.000	359.461	6913.00	4387.67	4325.07	-914.25	40.5168678	-104.5886336	0.00		
10630.00†	90.000	359.461	6913.00	4487.37	4425.06	-915.19	40.5171423	-104.5886333	0.00		
10730.00†	90.000	359.461	6913.00	4587.08	4525.06	-916.13	40.5174168	-104.5886330	0.00		
10830.00†	90.000	359.461	6913.00	4686.78	4625.06	-917.08	40.5176913	-104.5886327	0.00		
10930.00†	90.000	359.461	6913.00	4786.49	4725.05	-918.02	40.5179658	-104.5886324	0.00		
11030.00†	90.000	359.461	6913.00	4886.20	4825.05	-918.96	40.5182403	-104.5886321	0.00		
11130.00†	90.000	359.461	6913.00	4985.90	4925.04	-919.90	40.5185148	-104.5886317	0.00		
11230.00†	90.000	359.461	6913.00	5085.61	5025.04	-920.84	40.5187892	-104.5886314	0.00		
11330.00†	90.000	359.461	6913.00	5185.31	5125.03	-921.78	40.5190637	-104.5886311	0.00		
11430.00†	90.000	359.461	6913.00	5285.02	5225.03	-922.72	40.5193382	-104.5886308	0.00		
11530.00†	90.000	359.461	6913.00	5384.73	5325.02	-923.67	40.5196127	-104.5886305	0.00		
11630.00†	90.000	359.461	6913.00	5484.43	5425.02	-924.61	40.5198872	-104.5886302	0.00		
11730.00†	90.000	359.461	6913.00	5584.14	5525.02	-925.55	40.5201617	-104.5886299	0.00		
11830.00†	90.000	359.461	6913.00	5683.84	5625.01	-926.49	40.5204361	-104.5886296	0.00		
11930.00†	90.000	359.461	6913.00	5783.55	5725.01	-927.43	40.5207106	-104.5886293	0.00		
12030.00†	90.000	359.461	6913.00	5883.26	5825.00	-928.37	40.5209851	-104.5886289	0.00		
12130.00†	90.000	359.461	6913.00	5982.96	5925.00	-929.31	40.5212596	-104.5886286	0.00		
12230.00†	90.000	359.461	6913.00	6082.67	6024.99	-930.26	40.5215341	-104.5886283	0.00		
12330.00†	90.000	359.461	6913.00	6182.38	6124.99	-931.20	40.5218086	-104.5886280	0.00		
12430.00†	90.000	359.461	6913.00	6282.08	6224.98	-932.14	40.5220830	-104.5886277	0.00		
12530.00†	90.000	359.461	6913.00	6381.79	6324.98	-933.08	40.5223575	-104.5886274	0.00		
12630.00†	90.000	359.461	6913.00	6481.49	6424.98	-934.02	40.5226320	-104.5886271	0.00		
12730.00†	90.000	359.461	6913.00	6581.20	6524.97	-934.96	40.5229065	-104.5886268	0.00		
12830.00†	90.000	359.461	6913.00	6680.91	6624.97	-935.90	40.5231810	-104.5886265	0.00		
12930.00†	90.000	359.461	6913.00	6780.61	6724.96	-936.84	40.5234555	-104.5886262	0.00		



Planned Wellpath Report
BISHOP A06-731 (REV-B.0) PWP
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REFERENCE WELLPATH IDENTIFICATION											
Operator	NOBLE ENERGY, INC					Well	BISHOP A06-731				
Field	WELD COUNTY (NOBLE NAD 83 GRID)					API/Legal					
Facility	SEC.07-T06N-R64W					Wellbore	BISHOP A06-731 PWB				
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)										

WELLPATH DATA (182 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
13030.00†	90.000	359.461	6913.00	6880.32	6824.96	-937.79	40.5237299	-104.5886258	0.00		
13130.00†	90.000	359.461	6913.00	6980.02	6924.95	-938.73	40.5240044	-104.5886255	0.00		
13230.00†	90.000	359.461	6913.00	7079.73	7024.95	-939.67	40.5242789	-104.5886252	0.00		
13330.00†	90.000	359.461	6913.00	7179.44	7124.94	-940.61	40.5245534	-104.5886249	0.00		
13430.00†	90.000	359.461	6913.00	7279.14	7224.94	-941.55	40.5248279	-104.5886246	0.00		
13530.00†	90.000	359.461	6913.00	7378.85	7324.94	-942.49	40.5251024	-104.5886243	0.00		
13630.00†	90.000	359.461	6913.00	7478.56	7424.93	-943.43	40.5253768	-104.5886240	0.00		
13730.00†	90.000	359.461	6913.00	7578.26	7524.93	-944.38	40.5256513	-104.5886237	0.00		
13830.00†	90.000	359.461	6913.00	7677.97	7624.92	-945.32	40.5259258	-104.5886234	0.00		
13930.00†	90.000	359.461	6913.00	7777.67	7724.92	-946.26	40.5262003	-104.5886230	0.00		
14030.00†	90.000	359.461	6913.00	7877.38	7824.91	-947.20	40.5264748	-104.5886227	0.00		
14130.00†	90.000	359.461	6913.00	7977.09	7924.91	-948.14	40.5267493	-104.5886224	0.00		
14230.00†	90.000	359.461	6913.00	8076.79	8024.90	-949.08	40.5270237	-104.5886221	0.00		
14330.00†	90.000	359.461	6913.00	8176.50	8124.90	-950.02	40.5272982	-104.5886218	0.00		
14430.00†	90.000	359.461	6913.00	8276.20	8224.90	-950.97	40.5275727	-104.5886215	0.00		
14530.00†	90.000	359.461	6913.00	8375.91	8324.89	-951.91	40.5278472	-104.5886212	0.00		
14630.00†	90.000	359.461	6913.00	8475.62	8424.89	-952.85	40.5281217	-104.5886209	0.00		
14730.00†	90.000	359.461	6913.00	8575.32	8524.88	-953.79	40.5283962	-104.5886206	0.00		
14830.00†	90.000	359.461	6913.00	8675.03	8624.88	-954.73	40.5286706	-104.5886202	0.00		
14930.00†	90.000	359.461	6913.00	8774.74	8724.87	-955.67	40.5289451	-104.5886199	0.00		
15030.00†	90.000	359.461	6913.00	8874.44	8824.87	-956.61	40.5292196	-104.5886196	0.00		
15130.00†	90.000	359.461	6913.00	8974.15	8924.86	-957.56	40.5294941	-104.5886193	0.00		
15230.00†	90.000	359.461	6913.00	9073.85	9024.86	-958.50	40.5297686	-104.5886190	0.00		
15330.00†	90.000	359.461	6913.00	9173.56	9124.86	-959.44	40.5300431	-104.5886187	0.00		
15430.00†	90.000	359.461	6913.00	9273.27	9224.85	-960.38	40.5303175	-104.5886184	0.00		
15530.00†	90.000	359.461	6913.00	9372.97	9324.85	-961.32	40.5305920	-104.5886181	0.00		
15630.00†	90.000	359.461	6913.00	9472.68	9424.84	-962.26	40.5308665	-104.5886178	0.00		
15730.00†	90.000	359.461	6913.00	9572.38	9524.84	-963.20	40.5311410	-104.5886175	0.00		
15830.00†	90.000	359.461	6913.00	9672.09	9624.83	-964.15	40.5314155	-104.5886171	0.00		
15930.00†	90.000	359.461	6913.00	9771.80	9724.83	-965.09	40.5316900	-104.5886168	0.00		
16030.00†	90.000	359.461	6913.00	9871.50	9824.82	-966.03	40.5319644	-104.5886165	0.00		
16130.00†	90.000	359.461	6913.00	9971.21	9924.82	-966.97	40.5322389	-104.5886162	0.00		
16230.00†	90.000	359.461	6913.00	10070.91	10024.82	-967.91	40.5325134	-104.5886159	0.00		
16330.00†	90.000	359.461	6913.00	10170.62	10124.81	-968.85	40.5327879	-104.5886156	0.00		
16430.00†	90.000	359.461	6913.00	10270.33	10224.81	-969.79	40.5330624	-104.5886153	0.00		
16530.00†	90.000	359.461	6913.00	10370.03	10324.80	-970.74	40.5333369	-104.5886150	0.00		
16630.00†	90.000	359.461	6913.00	10469.74	10424.80	-971.68	40.5336113	-104.5886147	0.00		
16730.00†	90.000	359.461	6913.00	10569.45	10524.79	-972.62	40.5338858	-104.5886143	0.00		
16830.00†	90.000	359.461	6913.00	10669.15	10624.79	-973.56	40.5341603	-104.5886140	0.00		
16930.00†	90.000	359.461	6913.00	10768.86	10724.78	-974.50	40.5344348	-104.5886137	0.00		
17030.00†	90.000	359.461	6913.00	10868.56	10824.78	-975.44	40.5347093	-104.5886134	0.00		
17130.00†	90.000	359.461	6913.00	10968.27	10924.78	-976.38	40.5349838	-104.5886131	0.00		
17230.00†	90.000	359.461	6913.00	11067.98	11024.77	-977.33	40.5352582	-104.5886128	0.00		
17330.00†	90.000	359.461	6913.00	11167.68	11124.77	-978.27	40.5355327	-104.5886125	0.00		
17430.00†	90.000	359.461	6913.00	11267.39	11224.76	-979.21	40.5358072	-104.5886122	0.00		

REFERENCE WELLPATH IDENTIFICATION											
Operator	NOBLE ENERGY, INC					Well	BISHOP A06-731				
Field	WELD COUNTY (NOBLE NAD 83 GRID)					API/Legal					
Facility	SEC.07-T06N-R64W					Wellbore	BISHOP A06-731 PWB				
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)										

WELLPATH DATA (182 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
17530.00†	90.000	359.461	6913.00	11367.09	11324.76	-980.15	40.5360817	-104.5886119	0.00		
17565.15	90.000	359.461	6913.00‡	11402.15	11359.91	-980.48	40.5361782	-104.5886118	0.00	BHL	

HOLE & CASING SECTIONS - Ref Wellbore: BISHOP A06-731 PWB Ref Wellpath: BISHOP A06-731 (REV-B.0) PWP											
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]		
9.625in Casing Surface	30.00	1950.00	1920.00	30.00	1950.00	0.00	0.00	0.00	0.00		

TARGETS										
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	
OGDP 1 SEC.07-T06N-R64W	N/A	1.00	149.88	83.55	3254380.72	1428262.61	40.5053800	-104.5852000	polygon	
	2D Polygon: dimensions not calculated									
OGDP1 SEC.06-T06N-R64W	N/A	19.00	168.31	-4168.81	3250128.51	1428281.04	40.5055500	-104.6004900	polygon	
	2D Polygon: dimensions not calculated									
OGDP1 SEC.31-T07N-R64W	N/A	19.00	168.31	-4168.81	3250128.51	1428281.04	40.5055500	-104.6004900	polygon	
	2D Polygon: dimensions not calculated									
2) BISHOP A06-731 BHL Rev-1 (200'FSL & 1452'FEL,SEC.31)	17565.15	6913.00	11359.91	-980.48	3253316.72	1439472.25	40.5361782	-104.5886118	point	
1) BISHOP A06-731 LP Rev-1 (200'FSL & 1383'FEL,SEC.06)	7394.65	6913.00	1189.86	-884.73	3253412.46	1429302.55	40.5082618	-104.5886433	point	
DP 136 Hardlines (200'FNL/FSL & 300'FEL/FWL)	N/A	7002.00	150.07	67.42	3254364.58	1428262.81	40.5053810	-104.5852580	polygon	
	2D Polygon: dimensions not calculated									

SURVEY PROGRAM - Ref Wellbore: BISHOP A06-731 PWB Ref Wellpath: BISHOP A06-731 (REV-B.0) PWP											
Start MD [ft]	End MD [ft]	Positional Uncertainty Model				Log Name/Comment			Wellbore		
30.00	17565.15	OWSG MWD rev2 (MS+IFR1)							BISHOP A06-731 PWB		

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	305.833	30.00	SHL
2000.00	0.000	305.833	2000.00	End of Tangent
2666.54	13.331	305.833	2660.54	Build (XS)
6481.97	13.331	305.833	6373.17	KOP
7394.65	90.000	359.461	6913.00	LP/TPZ
17565.15	90.000	359.461	6913.00	BHL



Closest Approach Clearance Summary Report

BISHOP A06-731 (REV-B.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Martsam01
Scale	0.999967	Report Generated	10/6/2023 at 11:07:21 AM
Convergence at slot	0.59° East	Database	WA_Denver

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-149.88	-83.55	3254297.17	1428112.74	40°30'17.8956"N	104°35'7.8216"W
Facility Reference Pt			3254380.72	1428262.61	40°30'19.3680"N	104°35'6.7200"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.3150"N	105°30'0.0000"W

WELLPATH DATUM			
Calculation method	Minimum Curvature	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Facility Vertical Datum	4773.00ft
Horizontal Reference Pt	Slot	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Mean Sea Level	4773.00ft
Vertical Reference Pt	RIG (4743'GL+30'KB@4773'RKB) (RKB)	RIG (4743'GL+30'KB@4773'RKB) (RKB) to Ground Level at Slot (SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07))	4773.00ft
MD Reference Pt	RIG (4743'GL+30'KB@4773'RKB) (RKB)		
Field Vertical Reference	Mean Sea Level		

POSITIONAL UNCERTAINTY CALCULATION SETTINGS					
Ellipse Confidence Limit	3.50 Std Dev	Ellipse Start MD	30.00ft	Surface Position Uncertainty	included
Declination	7.38° East of TN	Dip Angle	66.68°	Mag Field Strength	51663 nT
Slot Surface Uncertainty @1SD		Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft	Vertical	3.000ft
Positional Uncertainty values in the WELLPATH DATA table are the projection of the ellipsoid of uncertainty onto the vertical and horizontal planes					

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

PROXIMITY-SCAN RULE			
Rule Name	SPE WPTS Stop Drilling HSE Risk (2017)	Rule Based On	Ratio
Plane of Rule	Closest Approach	Threshold Value	1.00
Include Casing & Hole Size	yes	Apply Cone of Safety	no

HOLE & CASING SECTIONS - Ref Wellbore: BISHOP A06-731 PWB Ref Wellpath: BISHOP A06-731 (REV-B.0) PWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	30.00	1950.00	1920.00	30.00	1950.00	0.00	0.00	0.00	0.00

SURVEY PROGRAM - Ref Wellbore: BISHOP A06-731 PWB Ref Wellpath: BISHOP A06-731 (REV-B.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	17565.15	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-731 PWB



Closest Approach Clearance Summary Report

BISHOP A06-731 (REV-B.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17565.15ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (73 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane												
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Wellbore Status	C-C Clearance Distance			Rule Separation Ratio			
						Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
SEC.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	7663.32	316.31	7663.32	7663.32	0.04	7663.32	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	9222.55	378.80	9222.55	9222.55	0.04	9222.55	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	11874.68	520.07	11874.68	11874.69	0.06	11874.69	FAIL
SEC.31-T07N-R64W	SLOT#05 UYEMURA #33-31 (05-123-22441)	UYEMURA #33-31	UYEMURA #33-31 AWB	UYEMURA #33-31 AWP	Drilling	14271.89	538.76	14271.89	14271.91	0.06	14271.91	FAIL
SEC.31-T07N-R64W	SLOT#10 PFENNING #44-31 (05-123-22574)	PFENNING #44-31	PFENNING #44-31 AWB	PFENNING #44-31 AWP	Drilling	13351.11	551.80	13351.11	13351.10	0.06	13351.10	FAIL
SEC.31-T07N-R64W	SLOT#02 PFENNING #43-31 (05-123-22378)	PFENNING #43-31	PFENNING #43-31 AWB	PFENNING #43-31 AWP	Drilling	14283.77	559.32	14283.77	14283.77	0.07	14283.77	FAIL
SEC.31-T07N-R64W	SLOT#14 UYEMURA #34-31 (05-123-21921)	UYEMURA #34-31	UYEMURA #34-31 AWB	UYEMURA #34-31 AWP	Drilling	13047.76	559.98	13047.76	13047.77	0.07	13047.77	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	9008.74	919.91	9008.74	9008.74	0.11	9008.74	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	8006.86	926.37	8006.86	8006.86	0.11	8006.86	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	7742.38	1637.21	7742.38	7742.38	0.19	7742.38	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	9144.98	1671.70	9144.98	9145.01	0.20	9145.01	FAIL
SEC.07-T06N-R64W	SLOT#37 DYER #42-7 (05-123-13959)	DYER #42-7 (05-123-13959)	DYER #42-7 AWB	DYER #42-7 AWP (05-123-13959)	Drilling	30.00	1074.19	2000.00	6526.43	0.20	6526.43	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	3777.24	1690.69	3777.24	6602.63	0.23	6602.63	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	6918.04	2014.37	6918.04	7095.86	0.24	7095.86	FAIL
SEC.06-T06N-R64W	SLOT#12 Stille #12-6H (05-123-34410)	Stille #12-6H	Stille #12-6H AWB	Stille #12-6H AWP	Drilling	11112.00	31.91	11112.00	11133.68	0.28	11133.68	FAIL
SEC.31-T07N-R64W	SLOT#08 BAY-USX AB #31-19 (05-123-24610)	BAY-USX AB #31-19	BAY-USX AB #31-19 AWB	BAY-USX AB #31-19 AWP	Drilling	16277.42	2430.96	16277.42	16277.63	0.28	16277.63	FAIL
SEC.31-T07N-R64W	SLOT#15 OWL CREEK #9 (05-123-11935)	OWL CREEK #9	OWL CREEK #9 AWB	OWL CREEK #9 AWP	Drilling	13089.59	2939.79	13089.59	13089.79	0.35	13089.79	FAIL
SEC.07-T06N-R64W	SLOT#35 CARLSON #33-7 (05-123-19548)	CARLSON #33-7 (05-123-19548)	CARLSON #33-7 AWB	CARLSON #33-7 AWP	Drilling	130.00	2570.87	2000.00	6676.61	0.36	6676.61	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	6977.51	3153.13	6977.51	7198.25	0.38	7198.25	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	6519.09	3107.01	6519.09	6837.36	0.39	6837.36	FAIL
SEC.07-T06N-R64W	SLOT#42 EHRLICH #4 (05-123-12738)	EHRLICH #4 (05-123-12738)	EHRLICH #4 AWB	EHRLICH #4 AWP	Drilling	6630.00	3485.06	6630.00	6979.96	0.43	6979.96	FAIL
SEC.07-T06N-R64W	SLOT#32 EHRLICH #3 (05-123-12737)	EHRLICH #3 (05-123-12737)	EHRLICH #3 AWB	EHRLICH #3 AWP	Drilling	5655.70	3474.87	5655.70	6797.84	0.44	6797.84	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	30.00	22.53	17530.00	2117.50	1.00	17565.15	WARN
SEC.07-T06N-R64W	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)	BISHOP A06-722	BISHOP A06-722 PWB	BISHOP A06-722 (REV-C.0) PWP	Planned	2000.94	22.53	17565.15	2032.27	1.01	17565.15	WARN
SEC.31-T07N-R64W	SLOT#06 ROUSE-USX AB #31-17 (05-123-24694)	ROUSE-USX AB #31-17	ROUSE-USX AB #31-17 AWB	ROUSE-USX AB #31-17 AWP	Drilling	16438.86	294.44	16438.86	16437.15	1.05	16437.15	WARN

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17565.15ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (73 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane												
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Wellbore Status	C-C Clearance Distance			Rule Separation Ratio			
						Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
SEC.07-T06N-R64W	SLOT#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	7171.04	114.09	7171.04	7172.04	1.86	7172.04	PASS
SEC.31-T07N-R64W	SLOT#03 ROUSE USX AB #31-02 (05-123-29402)	ROUSE USX AB #31-02	ROUSE USX AB #31-02 AWB	ROUSE USX AB #31-02 AWP	Drilling	17246.80	704.43	17246.80	17262.24	2.14	17262.24	PASS
SEC.31-T07N-R64W	SLOT#12 ROUSE USX AB #31-07 (05-123-29400)	ROUSE USX AB #31-07	ROUSE USX AB #31-07 AWB	ROUSE USX AB #31-07 AWP	Drilling	15598.23	723.35	15598.23	15616.43	2.53	15616.43	PASS
SEC.31-T07N-R64W	SLOT#07 ROUSE USX AB #31-08 (05-123-29406)	ROUSE USX AB #31-08	ROUSE USX AB #31-08 AWB	ROUSE USX AB #31-08 AWP	Drilling	15659.71	850.26	15659.71	15663.55	2.61	15663.55	PASS
SEC.31-T07N-R64W	SLOT#01 ROUSE USX AB #31-01 (05-123-29401)	ROUSE USX AB #31-01	ROUSE USX AB #31-01 AWB	ROUSE USX AB #31-01 AWP	Drilling	17290.47	917.45	17290.47	17297.34	3.20	17297.34	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	10684.10	441.23	10684.10	10712.84	4.51	10712.84	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	3823.12	159.50	3823.12	3927.57	4.56	3927.57	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	45.05	17565.15	830.10	4.90	17565.15	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	17547.46	1222.48	17547.46	17564.02	5.20	17564.02	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	2038.65	105.18	2038.65	2090.17	5.40	2090.17	PASS
SEC.31-T07N-R64W	SLOT#09 BAY-USX AB #31-6 (05-123-26532)	BAY-USX AB #31-6	BAY-USX AB #31-6 AWB	BAY-USX AB #31-6 AWP	Drilling	15604.38	1675.72	15604.38	15669.79	5.47	15669.79	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	1678.81	128.62	1678.81	1826.60	7.65	1826.60	PASS
SEC.07-T06N-R64W	SLOT#25 BISHOP A05-783 (1010'FNL & 441'FEL,SEC.07)	BISHOP A05-783	BISHOP A05-783 PWB	BISHOP A05-783 (REV-C.0) PWP	Planned	30.00	67.58	17565.15	17565.15	7.80	17565.15	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	17538.70	1836.23	17538.70	17565.15	7.82	17565.15	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	152.04	7030.00	7031.42	7.85	7031.42	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	2294.00	174.51	2294.00	2575.22	8.28	2575.22	PASS
SEC.31-T07N-R64W	SLOT#13 BAY USX #AB31-05 (05-123-34163)	BAY USX #AB31-05	BAY USX #AB31-05 AWB	BAY USX #AB31-05 AWP	Drilling	15745.42	3030.72	15745.42	15918.25	9.27	15918.25	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	151.90	7446.70	7446.70	9.61	7446.70	PASS
SEC.31-T07N-R64W	SLOT#04 BAY USX #AB31-04 (05-123-34162)	BAY USX #AB31-04	BAY USX #AB31-04 AWB	BAY USX #AB31-04 AWP	Drilling	17024.21	3009.43	17024.21	17231.45	9.83	17231.45	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	90.10	17565.15	17565.15	10.40	17565.15	PASS
SEC.07-T06N-R64W	SLOT#33 KREPS #1 (05-123-12736)	KREPS #1 (05-123-12736)	KREPS #1 AWB	KREPS #1 AWP	Drilling	6655.44	619.72	6655.44	6733.55	10.40	6733.55	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	17529.93	2445.00	17529.93	17565.15	10.44	17565.15	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	164.52	630.00	3112.70	12.82	3112.70	PASS
SEC.07-T06N-R64W	SLOT#27 BISHOP A05-764 (1011'FNL & 396'FEL,SEC.07)	BISHOP A05-764	BISHOP A05-764 PWB	BISHOP A05-764 (REV-C.0) PWP	Planned	30.00	112.63	17565.15	17565.15	12.88	17565.15	PASS
SEC.07-T06N-R64W	SLOT#17 BRASKALAND A06-782 (710'FNL & 319'FWL,SEC.07)	BRASKALAND A06-782	BRASKALAND A06-782 PWB	BRASKALAND A06-782 (REV-C.0) PWP	Planned	17521.16	3057.59	17521.16	17565.15	13.08	17565.15	PASS

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-731
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-731 PWB
Slot	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 17565.15ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (73 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane												
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Wellbore Status	C-C Clearance Distance			Rule Separation Ratio			
						Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
SEC.31-T07N-R64W	SLOT#11 ARY-USX AB #31-14 (05-123-24611)	ARY-USX AB #31-14	ARY-USX AB #31-14 AWB	ARY-USX AB #31-14 AWP	Drilling	13061.25	1790.86	13061.25	13303.54	14.47	13303.54	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	135.16	17565.15	17565.15	15.55	17565.15	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	156.77	6830.00	7110.14	15.95	7110.14	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	10290.03	1612.62	10290.03	10528.51	16.97	10528.51	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	11603.66	1901.63	11603.66	11905.58	17.62	11905.58	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	7167.66	1285.95	7167.66	7195.23	20.84	7195.23	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	7219.36	1864.91	7219.36	7388.89	30.71	7388.89	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	10306.36	3041.27	10306.36	11068.10	31.15	11068.10	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	8458.15	2619.21	8458.15	9011.13	32.09	9011.13	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	8969.28	2933.25	8969.28	9697.45	34.17	9697.45	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	7250.84	2442.66	7250.84	7894.05	40.65	7894.05	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	7953.86	3223.06	7953.86	8755.56	40.69	8755.56	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	5060.64	2679.68	5060.64	6530.39	45.78	6530.39	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	7313.31	3017.86	7313.31	8480.30	49.32	8480.30	PASS
SEC.07-T06N-R64W	SLOT#31 ROY CARLSON #43-7 (05-123-21867)	ROY CARLSON #43-7 (05-123-21867)	ROY CARLSON #43-7 AWB	ROY CARLSON #43-7 AWP	Drilling	30.00	2291.18	30.00	6714.08	53.41	6714.08	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	2355.46	2857.88	2355.46	6572.64	56.52	6572.64	PASS
SEC.07-T06N-R64W	SLOT#07 CARLSON A08-625 (1423'FSL & 844'FEL,SEC.07)	CARLSON A08-625	CARLSON A08-625 PWB	CARLSON A08-625 (REV-C.0) PWP	Planned	30.00	2858.74	2000.00	6679.10	67.93	6679.10	PASS
SEC.07-T06N-R64W	SLOT#43 CARLSON #34-7 (05-123-14251)	CARLSON #34-7 (05-123-14251)	CARLSON #34-7 AWB	CARLSON #34-7 AWP	Drilling	409.71	3901.25	1230.00	6826.24	71.78	6826.24	PASS
SEC.07-T06N-R64W	SLOT#36 EHRLICH #1 (05-123-12382)	EHRLICH #1 (05-123-12382)	EHRLICH #1 AWB	EHRLICH #1 AWP	Drilling	6482.49	4313.67	6482.49	6992.81	72.34	6992.81	PASS
SEC.07-T06N-R64W	SLOT#39 CARLSON #44-7 (05-123-14171)	CARLSON #44-7 (05-123-14171)	CARLSON #44-7 AWB	CARLSON #44-7 AWP (05-123-14171)	Drilling	30.00	3508.95	30.00	6730.00	73.40	6730.00	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	315.49	4554.86	3830.00	6851.88	78.53	6851.88	PASS
SEC.07-T06N-R64W	SLOT#08 CARLSON A08-615 (1422'FSL & 807'FEL,SEC.07)	CARLSON A08-615	CARLSON A08-615 PWB	CARLSON A08-615 (REV-C.0) PWP	Planned	30.00	2854.37	2000.00	6653.85	80.65	6653.85	PASS
SEC.07-T06N-R64W	SLOT#44 EHRLICH #2 (05-123-12460)	EHRLICH #2 (05-123-12460)	EHRLICH #2 AWB	EHRLICH #2 AWP	Drilling	5916.05	5280.29	5916.05	7006.95	87.79	7006.95	PASS