

NOBLE ENERGY, INC



Location: COLORADO Slot: SLOT#27 BISHOP A05-764 (1012FNL & 351FEL,SEC.07)
 Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: BISHOP A05-764
 Facility: SEC.07-T06N-R64W Wellbore: BISHOP A05-764 PWB

Plot reference wellpath is BISHOP A05-764 (REV-A.0) PWP
 True vertical depths are referenced to (4745GL+30KB@4775RKB) (RKB)
 Reference wellpath measured depths are referenced to (4745GL+30KB@4775RKB) (RKB)
 (4745GL+30KB@4775RKB) (RKB) to Mean Sea Level: 4775 feet
 Mean Sea Level to Ground level (At Slot: SLOT#27 BISHOP A05-764 (1012FNL & 351FEL,SEC.07)): 0 feet
 Offset wellpath MDs are referenced to each path's default MD datum
 Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
 North Reference: Grid north
 Scale: True distance
 Coordinates are in feet referenced to Slot
 Depths are in feet
 Created by: gwanaler on 2023-01-17; Database: WA_Denver

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.07-T06N-R64W		3254380.716	1428262.611	40°30'19.3680"N	104°35'6.7200"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#27 BISHOP A05-764 (1012FNL & 351FEL,SEC.07)	-148.82	73.84	3254454.554	1428114.000	40°30'17.8820"N	104°35'5.7840"W
(4745GL+30KB@4775RKB) (RKB) to Ground level (At Slot: SLOT#27 BISHOP A05-764 (1012FNL & 351FEL,SEC.07))					4775ft	
Mean Sea Level to Ground level (At Slot: SLOT#27 BISHOP A05-764 (1012FNL & 351FEL,SEC.07))					0ft	
(4745GL+30KB@4775RKB) (RKB) to Mean Sea Level					4775ft	

Well Profile Data

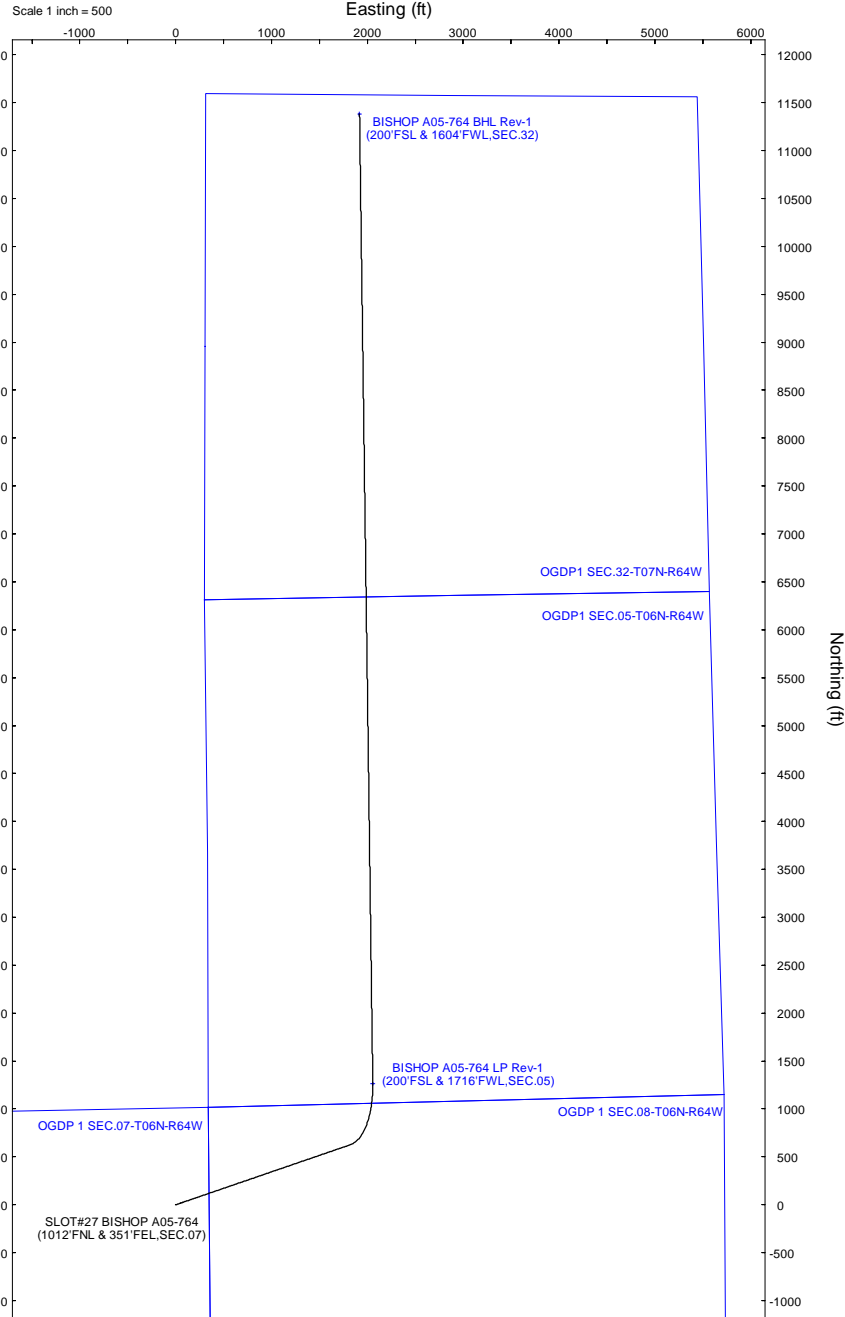
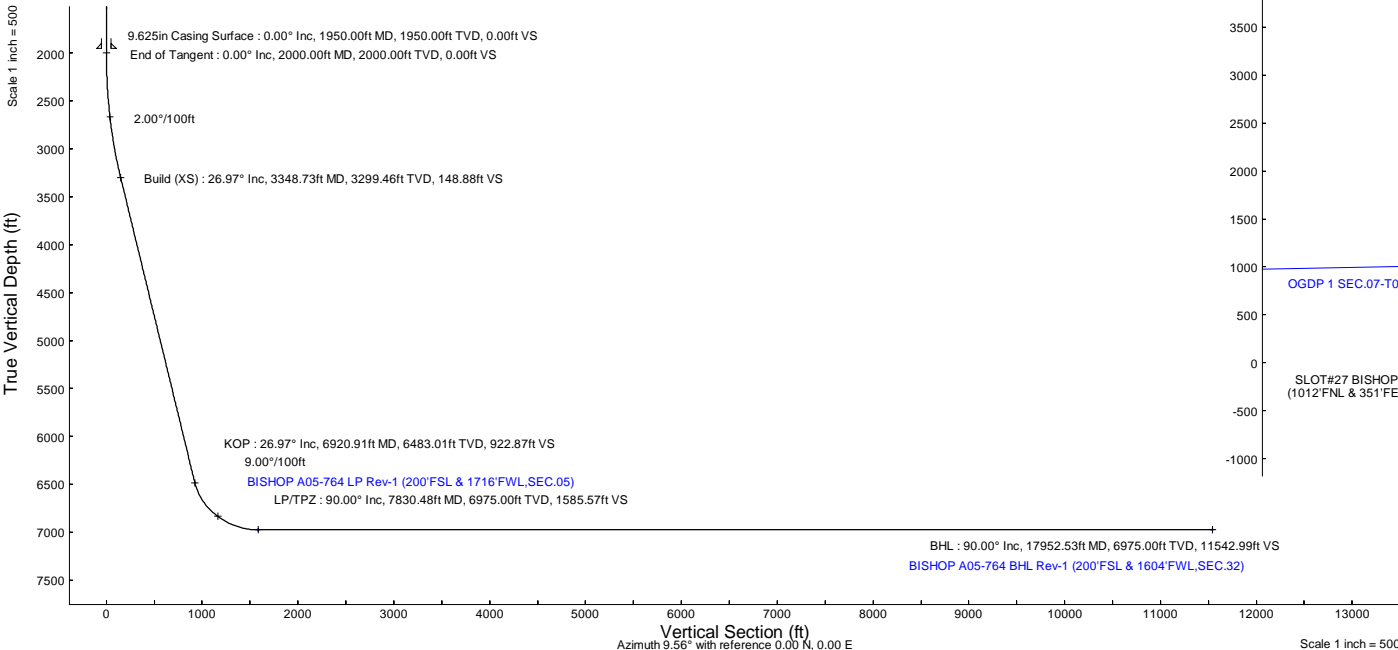
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
SHL	30.00	0.000	71.031	30.00	0.00	0.00	0.00	0.00
End of Tangent	2000.00	0.000	71.031	2000.00	0.00	0.00	0.00	0.00
Build (XS)	3348.73	26.975	71.031	3299.46	101.31	294.74	2.00	148.88
KOP	6920.91	26.975	71.031	6483.01	628.01	1827.07	0.00	922.87
LP/TPZ	7830.48	90.000	359.217	6975.00	1261.41	2056.34	9.00	1585.57
BHL	17952.53	90.000	359.217	6975.00	11382.53	1918.01	0.00	11542.99

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
OGDP 1 SEC.07-T06N-R64W	N/A	3.00	148.82	-73.84	3254380.72	1428262.61	40°30'19.3680"N	104°35'6.7200"W
OGDP 1 SEC.08-T06N-R64W	N/A	3.00	148.82	-73.84	3254380.72	1428262.61	40°30'19.3680"N	104°35'6.7200"W
OGDP1 SEC.05-T06N-R64W	N/A	21.00	167.05	-4326.20	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
OGDP1 SEC.32-T07N-R64W	N/A	21.00	167.05	-4326.20	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
BISHOP A05-764 BHL Rev-1 (200FSL & 1604FWL,SEC.32)	17952.53	6975.00	11382.53	1918.01	3256372.50	1439496.13	40°32'10.1651"N	104°34'39.4230"W
BISHOP A05-764 LP Rev-1 (200FSL & 1716FWL,SEC.05)	7830.48	6975.00	1261.41	2056.34	3256510.82	1429375.37	40°30'30.1454"N	104°34'38.9662"W

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
30.00	17952.53	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		BISHOP A05-764 PWB



Scale 1 inch = 500
 BGDW1 (1000.0 to 2024.0) Op: 66.71° Field: 51734.5 ft
 Magnetic Decl: 7.4 (2023.06.01) East of True North (at 11/17/2023)
 Grid North is 0.00 degrees East of True North
 To correct azimuth from True to Grid subtract 0.00 degrees
 To correct azimuth from Magnetic to Grid add 6.95 degrees



Planned Wellpath Report

BISHOP A05-764 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	BISHOP A05-764
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A05-764 PWB
Slot	SLOT#27 BISHOP A05-764 (1012'FNL & 351'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	1/17/2023 at 12:51:14 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	-148.62	73.84	3254454.55	1428114.00	40.5049700°	-104.5849400°
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	(4745'GL+30'KB@4775'RKB) (RKB) to Facility Vertical Datum	4775.00ft
Horizontal Reference Pt	Slot	(4745'GL+30'KB@4775'RKB) (RKB) to Mean Sea Level	4775.00ft
Vertical Reference Pt	(4745'GL+30'KB@4775'RKB) (RKB)	(4745'GL+30'KB@4775'RKB) (RKB) to Ground Level at Slot (SLOT#27 BISHOP A05-764 (1012'FNL & 351'FEL,SEC.07))	4775.00ft
MD Reference Pt	(4745'GL+30'KB@4775'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	9.56°



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A05-764 PWB
Slot	SLOT#27 BISHOP A05-764 (1012'FNL & 351'FEL,SEC.07)		

WELLPATH DATA (186 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	71.031	0.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
30.00	0.000	71.031	30.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	SHL
130.00†	0.000	71.031	130.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
230.00†	0.000	71.031	230.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
330.00†	0.000	71.031	330.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
430.00†	0.000	71.031	430.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
530.00†	0.000	71.031	530.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
630.00†	0.000	71.031	630.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
730.00†	0.000	71.031	730.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
830.00†	0.000	71.031	830.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
930.00†	0.000	71.031	930.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1030.00†	0.000	71.031	1030.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1130.00†	0.000	71.031	1130.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1230.00†	0.000	71.031	1230.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1330.00†	0.000	71.031	1330.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1430.00†	0.000	71.031	1430.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1530.00†	0.000	71.031	1530.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1630.00†	0.000	71.031	1630.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1730.00†	0.000	71.031	1730.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1830.00†	0.000	71.031	1830.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
1930.00†	0.000	71.031	1930.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	
2000.00	0.000	71.031	2000.00	0.00	0.00	0.00	40.5049700	-104.5849400	0.00	End of Tangent
2030.00†	0.600	71.031	2030.00	0.08	0.05	0.15	40.5049701	-104.5849395	2.00	
2130.00†	2.600	71.031	2129.96	1.41	0.96	2.79	40.5049726	-104.5849299	2.00	
2230.00†	4.600	71.031	2229.75	4.41	3.00	8.73	40.5049780	-104.5849085	2.00	
2330.00†	6.600	71.031	2329.27	9.07	6.17	17.95	40.5049864	-104.5848752	2.00	
2430.00†	8.600	71.031	2428.39	15.39	10.47	30.46	40.5049979	-104.5848301	2.00	
2530.00†	10.600	71.031	2526.98	23.35	15.89	46.23	40.5050123	-104.5847732	2.00	
2630.00†	12.600	71.031	2624.93	32.96	22.43	65.25	40.5050297	-104.5847046	2.00	
2730.00†	14.600	71.031	2722.13	44.19	30.07	87.48	40.5050501	-104.5846243	2.00	
2830.00†	16.600	71.031	2818.44	57.03	38.81	112.91	40.5050733	-104.5845325	2.00	
2930.00†	18.600	71.031	2913.75	71.48	48.64	141.51	40.5050995	-104.5844294	2.00	
3030.00†	20.600	71.031	3007.95	87.50	59.54	173.23	40.5051285	-104.5843149	2.00	
3130.00†	22.600	71.031	3100.93	105.08	71.51	208.04	40.5051604	-104.5841893	2.00	
3230.00†	24.600	71.031	3192.56	124.21	84.52	245.90	40.5051950	-104.5840527	2.00	
3330.00†	26.600	71.031	3282.74	144.84	98.57	286.76	40.5052324	-104.5839052	2.00	
3348.73	26.975	71.031	3299.46	148.88	101.31	294.74	40.5052397	-104.5838764	2.00	Build (XS)
3430.00†	26.975	71.031	3371.88	166.49	113.29	329.60	40.5052716	-104.5837506	0.00	
3530.00†	26.975	71.031	3461.00	188.15	128.04	372.50	40.5053109	-104.5835958	0.00	
3630.00†	26.975	71.031	3550.13	209.82	142.78	415.40	40.5053501	-104.5834410	0.00	
3730.00†	26.975	71.031	3639.25	231.49	157.53	458.29	40.5053894	-104.5832862	0.00	
3830.00†	26.975	71.031	3728.37	253.16	172.27	501.19	40.5054286	-104.5831314	0.00	
3930.00†	26.975	71.031	3817.49	274.82	187.02	544.08	40.5054679	-104.5829766	0.00	
4030.00†	26.975	71.031	3906.61	296.49	201.76	586.98	40.5055071	-104.5828218	0.00	
4130.00†	26.975	71.031	3995.73	318.16	216.51	629.88	40.5055464	-104.5826670	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A05-764
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A05-764 PWB
Slot	SLOT#27 BISHOP A05-764 (1012'FNL & 351'FEL,SEC.07)		

WELLPATH DATA (186 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
4230.00†	26.975	71.031	4084.85	339.83	231.25	672.77	40.5055856	-104.5825123	0.00		
4330.00†	26.975	71.031	4173.97	361.49	246.00	715.67	40.5056249	-104.5823575	0.00		
4430.00†	26.975	71.031	4263.09	383.16	260.74	758.57	40.5056641	-104.5822027	0.00		
4530.00†	26.975	71.031	4352.21	404.83	275.48	801.46	40.5057034	-104.5820479	0.00		
4630.00†	26.975	71.031	4441.33	426.50	290.23	844.36	40.5057426	-104.5818931	0.00		
4730.00†	26.975	71.031	4530.45	448.16	304.97	887.25	40.5057819	-104.5817383	0.00		
4830.00†	26.975	71.031	4619.57	469.83	319.72	930.15	40.5058211	-104.5815835	0.00		
4930.00†	26.975	71.031	4708.69	491.50	334.46	973.05	40.5058604	-104.5814287	0.00		
5030.00†	26.975	71.031	4797.82	513.16	349.21	1015.94	40.5058996	-104.5812739	0.00		
5130.00†	26.975	71.031	4886.94	534.83	363.95	1058.84	40.5059389	-104.5811191	0.00		
5230.00†	26.975	71.031	4976.06	556.50	378.70	1101.74	40.5059781	-104.5809643	0.00		
5330.00†	26.975	71.031	5065.18	578.17	393.44	1144.63	40.5060174	-104.5808095	0.00		
5430.00†	26.975	71.031	5154.30	599.83	408.19	1187.53	40.5060566	-104.5806547	0.00		
5530.00†	26.975	71.031	5243.42	621.50	422.93	1230.43	40.5060959	-104.5804999	0.00		
5630.00†	26.975	71.031	5332.54	643.17	437.68	1273.32	40.5061351	-104.5803451	0.00		
5730.00†	26.975	71.031	5421.66	664.84	452.42	1316.22	40.5061744	-104.5801903	0.00		
5830.00†	26.975	71.031	5510.78	686.50	467.16	1359.11	40.5062136	-104.5800355	0.00		
5930.00†	26.975	71.031	5599.90	708.17	481.91	1402.01	40.5062529	-104.5798807	0.00		
6030.00†	26.975	71.031	5689.02	729.84	496.65	1444.91	40.5062921	-104.5797259	0.00		
6130.00†	26.975	71.031	5778.14	751.51	511.40	1487.80	40.5063314	-104.5795711	0.00		
6230.00†	26.975	71.031	5867.26	773.17	526.14	1530.70	40.5063706	-104.5794163	0.00		
6330.00†	26.975	71.031	5956.38	794.84	540.89	1573.60	40.5064099	-104.5792615	0.00		
6430.00†	26.975	71.031	6045.51	816.51	555.63	1616.49	40.5064491	-104.5791067	0.00		
6530.00†	26.975	71.031	6134.63	838.18	570.38	1659.39	40.5064884	-104.5789519	0.00		
6630.00†	26.975	71.031	6223.75	859.84	585.12	1702.28	40.5065276	-104.5787971	0.00		
6730.00†	26.975	71.031	6312.87	881.51	599.87	1745.18	40.5065669	-104.5786423	0.00		
6830.00†	26.975	71.031	6401.99	903.18	614.61	1788.08	40.5066061	-104.5784875	0.00		
6920.91	26.975	71.031	6483.01	922.87	628.01	1827.07	40.5066418	-104.5783468	0.00	KOP	
6930.00†	27.215	69.313	6491.10	924.91	629.42	1830.97	40.5066455	-104.5783327	9.00		
7030.00†	31.083	52.550	6578.57	955.37	653.24	1872.94	40.5067097	-104.5781809	9.00		
7130.00†	36.635	39.779	6661.68	1000.13	691.95	1912.60	40.5068148	-104.5780368	9.00		
7230.00†	43.220	30.186	6738.40	1058.08	744.58	1948.98	40.5069582	-104.5779040	9.00		
7330.00†	50.427	22.773	6806.83	1127.79	809.85	1981.19	40.5071365	-104.5777858	9.00		
7430.00†	58.014	16.794	6865.29	1207.55	886.14	2008.41	40.5073451	-104.5776851	9.00		
7530.00†	65.838	11.746	6912.34	1295.39	971.58	2030.00	40.5075790	-104.5776042	9.00		
7630.00†	73.809	7.288	6946.82	1389.14	1064.07	2045.41	40.5078324	-104.5775454	9.00		
7730.00†	81.865	3.180	6967.88	1486.51	1161.32	2054.26	40.5080990	-104.5775099	9.00		
7830.00†	89.961	359.236	6975.00	1585.10	1260.94	2056.35	40.5083724	-104.5774987	9.00		
7830.48	90.000	359.217	6975.00†	1585.57	1261.41	2056.34	40.5083737	-104.5774987	9.00	LP/TPZ	
7930.00†	90.000	359.217	6975.00	1683.47	1360.93	2054.98	40.5086469	-104.5774998	0.00		
8030.00†	90.000	359.217	6975.00	1781.84	1460.92	2053.61	40.5089214	-104.5775010	0.00		
8130.00†	90.000	359.217	6975.00	1880.22	1560.91	2052.25	40.5091959	-104.5775022	0.00		
8230.00†	90.000	359.217	6975.00	1978.59	1660.90	2050.88	40.5094703	-104.5775034	0.00		
8330.00†	90.000	359.217	6975.00	2076.96	1760.89	2049.51	40.5097448	-104.5775045	0.00		
8430.00†	90.000	359.217	6975.00	2175.34	1860.88	2048.15	40.5100193	-104.5775057	0.00		



Planned Wellpath Report

BISHOP A05-764 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	BISHOP A05-764
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A05-764 PWB
Slot	SLOT#27 BISHOP A05-764 (1012'FNL & 351'FEL,SEC.07)		

WELLPATH DATA (186 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	359.217	6975.00	2273.71	1960.87	2046.78	40.5102938	-104.5775069	0.00	
8630.00†	90.000	359.217	6975.00	2372.08	2060.86	2045.41	40.5105683	-104.5775081	0.00	
8730.00†	90.000	359.217	6975.00	2470.46	2160.85	2044.05	40.5108428	-104.5775092	0.00	
8830.00†	90.000	359.217	6975.00	2568.83	2260.84	2042.68	40.5111172	-104.5775104	0.00	
8930.00†	90.000	359.217	6975.00	2667.21	2360.83	2041.31	40.5113917	-104.5775116	0.00	
9030.00†	90.000	359.217	6975.00	2765.58	2460.83	2039.95	40.5116662	-104.5775128	0.00	
9130.00†	90.000	359.217	6975.00	2863.95	2560.82	2038.58	40.5119407	-104.5775139	0.00	
9230.00†	90.000	359.217	6975.00	2962.33	2660.81	2037.21	40.5122152	-104.5775151	0.00	
9330.00†	90.000	359.217	6975.00	3060.70	2760.80	2035.85	40.5124897	-104.5775163	0.00	
9430.00†	90.000	359.217	6975.00	3159.07	2860.79	2034.48	40.5127641	-104.5775174	0.00	
9530.00†	90.000	359.217	6975.00	3257.45	2960.78	2033.11	40.5130386	-104.5775186	0.00	
9630.00†	90.000	359.217	6975.00	3355.82	3060.77	2031.75	40.5133131	-104.5775198	0.00	
9730.00†	90.000	359.217	6975.00	3454.19	3160.76	2030.38	40.5135876	-104.5775210	0.00	
9830.00†	90.000	359.217	6975.00	3552.57	3260.75	2029.01	40.5138621	-104.5775221	0.00	
9930.00†	90.000	359.217	6975.00	3650.94	3360.74	2027.65	40.5141366	-104.5775233	0.00	
10030.00†	90.000	359.217	6975.00	3749.31	3460.73	2026.28	40.5144110	-104.5775245	0.00	
10130.00†	90.000	359.217	6975.00	3847.69	3560.72	2024.91	40.5146855	-104.5775257	0.00	
10230.00†	90.000	359.217	6975.00	3946.06	3660.71	2023.55	40.5149600	-104.5775268	0.00	
10330.00†	90.000	359.217	6975.00	4044.43	3760.70	2022.18	40.5152345	-104.5775280	0.00	
10430.00†	90.000	359.217	6975.00	4142.81	3860.69	2020.81	40.5155090	-104.5775292	0.00	
10530.00†	90.000	359.217	6975.00	4241.18	3960.69	2019.45	40.5157835	-104.5775304	0.00	
10630.00†	90.000	359.217	6975.00	4339.56	4060.68	2018.08	40.5160579	-104.5775315	0.00	
10730.00†	90.000	359.217	6975.00	4437.93	4160.67	2016.71	40.5163324	-104.5775327	0.00	
10830.00†	90.000	359.217	6975.00	4536.30	4260.66	2015.35	40.5166069	-104.5775339	0.00	
10930.00†	90.000	359.217	6975.00	4634.68	4360.65	2013.98	40.5168814	-104.5775351	0.00	
11030.00†	90.000	359.217	6975.00	4733.05	4460.64	2012.61	40.5171559	-104.5775362	0.00	
11130.00†	90.000	359.217	6975.00	4831.42	4560.63	2011.25	40.5174304	-104.5775374	0.00	
11230.00†	90.000	359.217	6975.00	4929.80	4660.62	2009.88	40.5177048	-104.5775386	0.00	
11330.00†	90.000	359.217	6975.00	5028.17	4760.61	2008.51	40.5179793	-104.5775397	0.00	
11430.00†	90.000	359.217	6975.00	5126.54	4860.60	2007.15	40.5182538	-104.5775409	0.00	
11530.00†	90.000	359.217	6975.00	5224.92	4960.59	2005.78	40.5185283	-104.5775421	0.00	
11630.00†	90.000	359.217	6975.00	5323.29	5060.58	2004.41	40.5188028	-104.5775433	0.00	
11730.00†	90.000	359.217	6975.00	5421.66	5160.57	2003.05	40.5190772	-104.5775444	0.00	
11830.00†	90.000	359.217	6975.00	5520.04	5260.56	2001.68	40.5193517	-104.5775456	0.00	
11930.00†	90.000	359.217	6975.00	5618.41	5360.55	2000.32	40.5196262	-104.5775468	0.00	
12030.00†	90.000	359.217	6975.00	5716.79	5460.55	1998.95	40.5199007	-104.5775480	0.00	
12130.00†	90.000	359.217	6975.00	5815.16	5560.54	1997.58	40.5201752	-104.5775491	0.00	
12230.00†	90.000	359.217	6975.00	5913.53	5660.53	1996.22	40.5204497	-104.5775503	0.00	
12330.00†	90.000	359.217	6975.00	6011.91	5760.52	1994.85	40.5207241	-104.5775515	0.00	
12430.00†	90.000	359.217	6975.00	6110.28	5860.51	1993.48	40.5209986	-104.5775527	0.00	
12530.00†	90.000	359.217	6975.00	6208.65	5960.50	1992.12	40.5212731	-104.5775538	0.00	
12630.00†	90.000	359.217	6975.00	6307.03	6060.49	1990.75	40.5215476	-104.5775550	0.00	
12730.00†	90.000	359.217	6975.00	6405.40	6160.48	1989.38	40.5218221	-104.5775562	0.00	
12830.00†	90.000	359.217	6975.00	6503.77	6260.47	1988.02	40.5220966	-104.5775574	0.00	
12930.00†	90.000	359.217	6975.00	6602.15	6360.46	1986.65	40.5223710	-104.5775585	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A05-764
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A05-764 PWB
Slot	SLOT#27 BISHOP A05-764 (1012'FNL & 351'FEL,SEC.07)		

WELLPATH DATA (186 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	359.217	6975.00	6700.52	6460.45	1985.28	40.5226455	-104.5775597	0.00	
13130.00†	90.000	359.217	6975.00	6798.89	6560.44	1983.92	40.5229200	-104.5775609	0.00	
13230.00†	90.000	359.217	6975.00	6897.27	6660.43	1982.55	40.5231945	-104.5775621	0.00	
13330.00†	90.000	359.217	6975.00	6995.64	6760.42	1981.18	40.5234690	-104.5775632	0.00	
13430.00†	90.000	359.217	6975.00	7094.02	6860.41	1979.82	40.5237434	-104.5775644	0.00	
13530.00†	90.000	359.217	6975.00	7192.39	6960.41	1978.45	40.5240179	-104.5775656	0.00	
13630.00†	90.000	359.217	6975.00	7290.76	7060.40	1977.08	40.5242924	-104.5775667	0.00	
13730.00†	90.000	359.217	6975.00	7389.14	7160.39	1975.72	40.5245669	-104.5775679	0.00	
13830.00†	90.000	359.217	6975.00	7487.51	7260.38	1974.35	40.5248414	-104.5775691	0.00	
13930.00†	90.000	359.217	6975.00	7585.88	7360.37	1972.98	40.5251159	-104.5775703	0.00	
14030.00†	90.000	359.217	6975.00	7684.26	7460.36	1971.62	40.5253903	-104.5775714	0.00	
14130.00†	90.000	359.217	6975.00	7782.63	7560.35	1970.25	40.5256648	-104.5775726	0.00	
14230.00†	90.000	359.217	6975.00	7881.00	7660.34	1968.88	40.5259393	-104.5775738	0.00	
14330.00†	90.000	359.217	6975.00	7979.38	7760.33	1967.52	40.5262138	-104.5775750	0.00	
14430.00†	90.000	359.217	6975.00	8077.75	7860.32	1966.15	40.5264883	-104.5775761	0.00	
14530.00†	90.000	359.217	6975.00	8176.12	7960.31	1964.78	40.5267627	-104.5775773	0.00	
14630.00†	90.000	359.217	6975.00	8274.50	8060.30	1963.42	40.5270372	-104.5775785	0.00	
14730.00†	90.000	359.217	6975.00	8372.87	8160.29	1962.05	40.5273117	-104.5775797	0.00	
14830.00†	90.000	359.217	6975.00	8471.24	8260.28	1960.68	40.5275862	-104.5775808	0.00	
14930.00†	90.000	359.217	6975.00	8569.62	8360.27	1959.32	40.5278607	-104.5775820	0.00	
15030.00†	90.000	359.217	6975.00	8667.99	8460.27	1957.95	40.5281352	-104.5775832	0.00	
15130.00†	90.000	359.217	6975.00	8766.37	8560.26	1956.58	40.5284096	-104.5775844	0.00	
15230.00†	90.000	359.217	6975.00	8864.74	8660.25	1955.22	40.5286841	-104.5775855	0.00	
15330.00†	90.000	359.217	6975.00	8963.11	8760.24	1953.85	40.5289586	-104.5775867	0.00	
15430.00†	90.000	359.217	6975.00	9061.49	8860.23	1952.48	40.5292331	-104.5775879	0.00	
15530.00†	90.000	359.217	6975.00	9159.86	8960.22	1951.12	40.5295076	-104.5775891	0.00	
15630.00†	90.000	359.217	6975.00	9258.23	9060.21	1949.75	40.5297820	-104.5775902	0.00	
15730.00†	90.000	359.217	6975.00	9356.61	9160.20	1948.38	40.5300565	-104.5775914	0.00	
15830.00†	90.000	359.217	6975.00	9454.98	9260.19	1947.02	40.5303310	-104.5775926	0.00	
15930.00†	90.000	359.217	6975.00	9553.35	9360.18	1945.65	40.5306055	-104.5775938	0.00	
16030.00†	90.000	359.217	6975.00	9651.73	9460.17	1944.29	40.5308800	-104.5775949	0.00	
16130.00†	90.000	359.217	6975.00	9750.10	9560.16	1942.92	40.5311545	-104.5775961	0.00	
16230.00†	90.000	359.217	6975.00	9848.47	9660.15	1941.55	40.5314289	-104.5775973	0.00	
16330.00†	90.000	359.217	6975.00	9946.85	9760.14	1940.19	40.5317034	-104.5775984	0.00	
16430.00†	90.000	359.217	6975.00	10045.22	9860.13	1938.82	40.5319779	-104.5775996	0.00	
16530.00†	90.000	359.217	6975.00	10143.60	9960.13	1937.45	40.5322524	-104.5776008	0.00	
16630.00†	90.000	359.217	6975.00	10241.97	10060.12	1936.09	40.5325269	-104.5776020	0.00	
16730.00†	90.000	359.217	6975.00	10340.34	10160.11	1934.72	40.5328013	-104.5776031	0.00	
16830.00†	90.000	359.217	6975.00	10438.72	10260.10	1933.35	40.5330758	-104.5776043	0.00	
16930.00†	90.000	359.217	6975.00	10537.09	10360.09	1931.99	40.5333503	-104.5776055	0.00	
17030.00†	90.000	359.217	6975.00	10635.46	10460.08	1930.62	40.5336248	-104.5776067	0.00	
17130.00†	90.000	359.217	6975.00	10733.84	10560.07	1929.25	40.5338993	-104.5776078	0.00	
17230.00†	90.000	359.217	6975.00	10832.21	10660.06	1927.89	40.5341738	-104.5776090	0.00	
17330.00†	90.000	359.217	6975.00	10930.58	10760.05	1926.52	40.5344482	-104.5776102	0.00	
17430.00†	90.000	359.217	6975.00	11028.96	10860.04	1925.15	40.5347227	-104.5776114	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A05-764
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A05-764 PWB
Slot	SLOT#27 BISHOP A05-764 (1012'FNL & 351'FEL,SEC.07)		

WELLPATH DATA (186 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	359.217	6975.00	11127.33	10960.03	1923.79	40.5349972	-104.5776125	0.00	
17630.00†	90.000	359.217	6975.00	11225.70	11060.02	1922.42	40.5352717	-104.5776137	0.00	
17730.00†	90.000	359.217	6975.00	11324.08	11160.01	1921.05	40.5355462	-104.5776149	0.00	
17830.00†	90.000	359.217	6975.00	11422.45	11260.00	1919.69	40.5358206	-104.5776161	0.00	
17930.00†	90.000	359.217	6975.00	11520.83	11359.99	1918.32	40.5360951	-104.5776172	0.00	
17952.53	90.000	359.217	6975.00 [‡]	11542.99	11382.53	1918.01	40.5361570	-104.5776175	0.00	BHL

HOLE & CASING SECTIONS - Ref Wellbore: BISHOP A05-764 PWB Ref Wellpath: BISHOP A05-764 (REV-A.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	3.00	148.62	-73.84	3254380.72	1428262.61	40.5053800	-104.5852000	polygon	
2D Polygon: dimensions not calculated										
OGDP 1 SEC.08-T06N-R64W	N/A	3.00	148.62	-73.84	3254380.72	1428262.61	40.5053800	-104.5852000	polygon	
2D Polygon: dimensions not calculated										
OGDP1 SEC.05-T06N-R64W	N/A	21.00	167.05	-4326.20	3250128.51	1428281.04	40.5055500	-104.6004900	polygon	
2D Polygon: dimensions not calculated										
OGDP1 SEC.32-T07N-R64W	N/A	21.00	167.05	-4326.20	3250128.51	1428281.04	40.5055500	-104.6004900	polygon	
2D Polygon: dimensions not calculated										
2) BISHOP A05-764 BHL Rev-1 (200'FSL & 1604'FWL,SEC.32)	17952.53	6975.00	11382.53	1918.01	3256372.50	1439496.13	40.5361570	-104.5776175	point	
1) BISHOP A05-764 LP Rev-1 (200'FSL & 1716'FWL,SEC.05)	7830.48	6975.00	1261.41	2056.34	3256510.82	1429375.37	40.5083737	-104.5774987	point	

SURVEY PROGRAM - Ref Wellbore: BISHOP A05-764 PWB Ref Wellpath: BISHOP A05-764 (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	17952.53	OWSG MWD rev2 (MS+IFR1)		BISHOP A05-764 PWB



Planned Wellpath Report
 BISHOP A05-764 (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A05-764
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A05-764 PWB
Slot	SLOT#27 BISHOP A05-764 (1012'FNL & 351'FEL,SEC.07)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	71.031	30.00	SHL
2000.00	0.000	71.031	2000.00	End of Tangent
3348.73	26.975	71.031	3299.46	Build (XS)
6920.91	26.975	71.031	6483.01	KOP
7830.48	90.000	359.217	6975.00	LP/TPZ
17952.53	90.000	359.217	6975.00	BHL