

# NOBLE ENERGY, INC



Location: COLORADO Slot: SLOT#24 BISHOP A06-712 (1010FNL & 463FEL, SEC.07)  
 Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: BISHOP A06-712  
 Facility: SEC.07-T06N-R64W Wellbore: BISHOP A06-712 PWB

**Plot reference wellpath is BISHOP A06-712 (REV-C.0) PWP**  
 Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet  
 True vertical depths are referenced to RIG (4744GL+30KB@4774RKB) (RKB)  
 North Reference: Grid north  
 Reference wellpath measured depths are referenced to RIG (4744GL+30KB@4774RKB) (RKB)  
 Scale: True distance  
 RIG (4744GL+30KB@4774RKB) (RKB) to Mean Sea Level: 4774 feet  
 Coordinates are in feet referenced to Slot  
 Mean Sea Level to Ground level (At Slot: SLOT#24 BISHOP A06-712 (1010FNL & 463FEL, SEC.07)): 0 feet  
 Depths are in feet  
 Offset wellpath MDs are referenced to each path's default MD datum  
 Created by: martsam01 on 2023-10-06, Database: WA, Denver

### Location Information

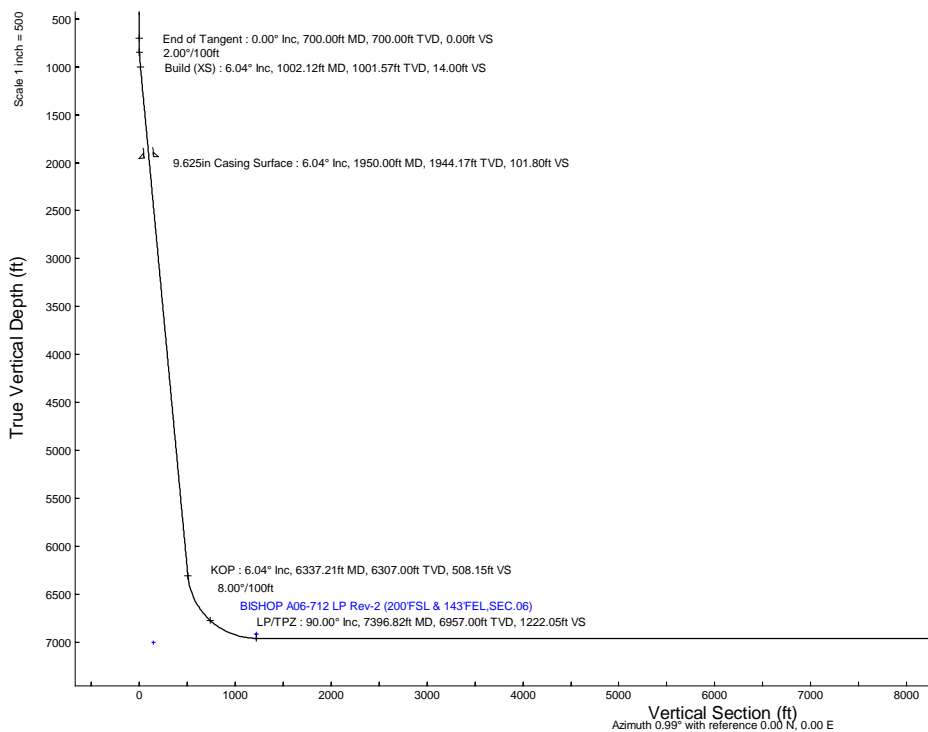
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.07-T06N-R64W		3254380.716	1428262.611	40°30'19.3680"N	104°35'6.7200"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#24 BISHOP A06-712 (1010FNL & 463FEL, SEC.07)	-149.78	-38.50	3254342.216	1428112.841	40°30'17.8920"N	104°35'7.2384"W
RIG (4744GL+30KB@4774RKB) (RKB) to Ground level (At Slot: SLOT#24 BISHOP A06-712 (1010FNL & 463FEL, SEC.07))						4774ft
Mean Sea Level to Ground level (At Slot: SLOT#24 BISHOP A06-712 (1010FNL & 463FEL, SEC.07))						0ft
RIG (4744GL+30KB@4774RKB) (RKB) to Mean Sea Level						4774ft

### Well Profile Data

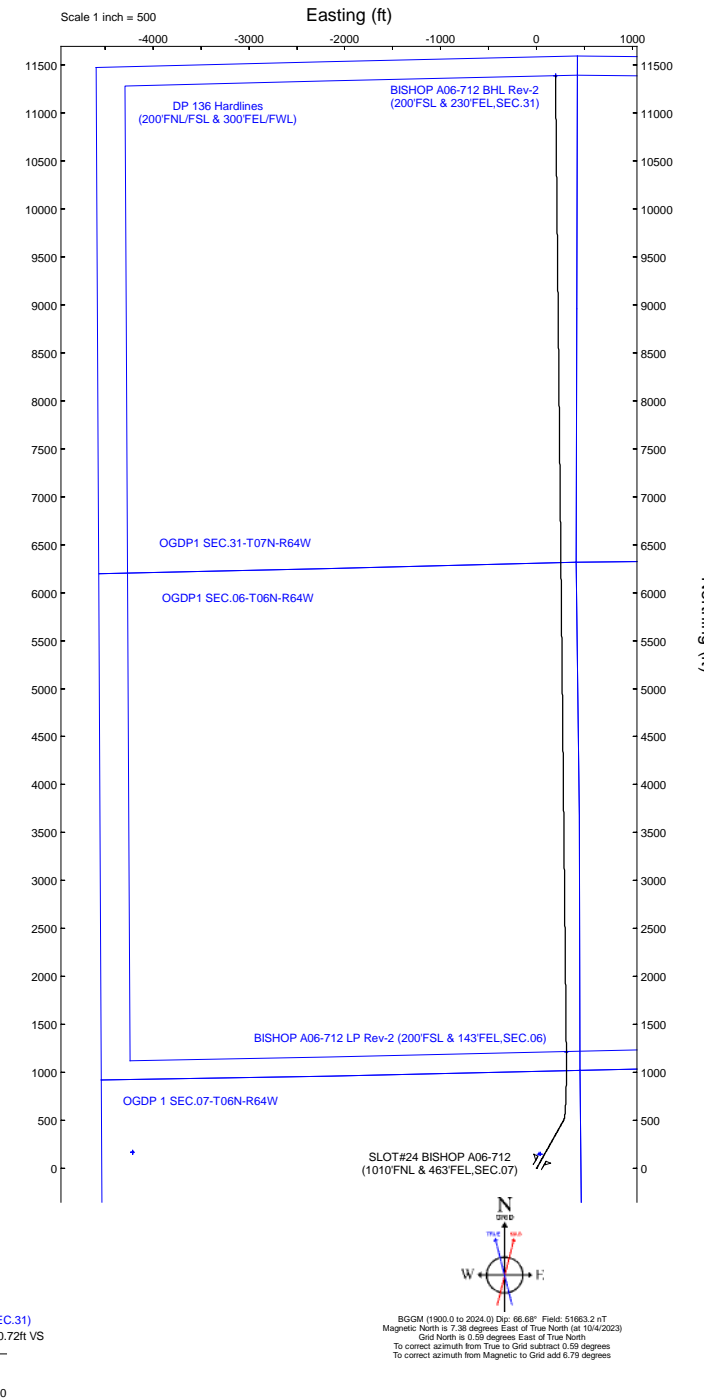
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
SHL	30.00	0.000	29.362	30.00	0.00	0.00	0.00	0.00
End of Tangent	700.00	0.000	29.362	700.00	0.00	0.00	0.00	0.00
Build (XS)	1002.12	6.042	29.362	1001.57	13.87	7.80	2.00	14.00
KOP	6337.21	6.042	29.362	6307.00	503.33	283.17	0.00	508.15
LP/TPZ	7396.82	90.000	359.364	6957.00	1216.89	309.65	8.00	1222.05
BHL	17569.58	90.000	359.364	6957.00	11389.02	196.65	0.00	11390.72

### 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	2.00	149.78	38.50	3254380.72	1428262.61	40°30'19.3680"N	104°35'6.7200"W
OGDP 1 SEC.08-T06N-R64W	N/A	2.00	149.78	38.50	3254380.72	1428262.61	40°30'19.3680"N	104°35'6.7200"W
OGDP1 SEC.05-T06N-R64W	N/A	20.00	168.21	-4213.86	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
OGDP1 SEC.06-T06N-R64W	N/A	20.00	168.21	-4213.86	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
OGDP1 SEC.31-T07N-R64W	N/A	20.00	168.21	-4213.86	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
OGDP1 SEC.32-T07N-R64W	N/A	20.00	168.21	-4213.86	3250128.51	1428281.04	40°30'19.9800"N	104°36'1.7640"W
BISHOP A06-712 BHL Rev-1 (200FSL & 230FEL, SEC.31)	N/A	8914.00	11389.02	196.65	3254538.86	1439501.46	40°32'10.4056"N	104°35'3.1701"W
BISHOP A06-712 LP Rev-1 (200FSL & 143FEL, SEC.06)	N/A	8914.00	1216.89	309.65	3254651.85	1429329.68	40°30'29.8844"N	104°35'3.0674"W
BISHOP A06-712 BHL Rev-2 (200FSL & 230FEL, SEC.31)	17569.58	6957.00	11389.02	196.65	3254538.86	1439501.46	40°32'10.4056"N	104°35'3.1701"W
BISHOP A06-712 LP Rev-2 (200FSL & 143FEL, SEC.06)	7396.82	6957.00	1216.89	309.65	3254651.85	1429329.68	40°30'29.8844"N	104°35'3.0674"W
DP 136 Hardlines (200FNL/FSL & 300FEL/FWL)	N/A	7003.00	149.97	22.37	3254364.58	1428262.81	40°30'19.3716"N	104°35'6.9288"W



Survey Program					
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
30.00	1950.00	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-712 PWB
1950.00	17569.58	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-712 PWB



## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'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 11:32:02 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	-149.78	-38.50	3254342.22	1428112.84	40.5049700°	-104.5853440°
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 (4744'GL+30'KB@4774'RKB) (RKB) to Facility Vertical Datum	4774.00ft
Horizontal Reference Pt	Slot	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Mean Sea Level	4774.00ft
Vertical Reference Pt	RIG (4744'GL+30'KB@4774'RKB) (RKB)	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Ground Level at Slot (SLOT#24 BISHOP A06-712 (1010'FNL & 463'FEL,SEC.07))	4774.00ft
MD Reference Pt	RIG (4744'GL+30'KB@4774'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.99°

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'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	29.362	0.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	
30.00	0.000	29.362	30.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	SHL
130.00†	0.000	29.362	130.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	
230.00†	0.000	29.362	230.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	
330.00†	0.000	29.362	330.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	
430.00†	0.000	29.362	430.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	
530.00†	0.000	29.362	530.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	
630.00†	0.000	29.362	630.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	
700.00	0.000	29.362	700.00	0.00	0.00	0.00	40.5049700	-104.5853440	0.00	End of Tangent
730.00†	0.600	29.362	730.00	0.14	0.14	0.08	40.5049704	-104.5853437	2.00	
830.00†	2.600	29.362	829.96	2.59	2.57	1.45	40.5049770	-104.5853387	2.00	
930.00†	4.600	29.362	929.75	8.12	8.04	4.52	40.5049919	-104.5853274	2.00	
1002.12	6.042	29.362	1001.57	14.00	13.87	7.80	40.5050079	-104.5853154	2.00	Build (XS)
1030.00†	6.042	29.362	1029.29	16.59	16.43	9.24	40.5050148	-104.5853102	0.00	
1130.00†	6.042	29.362	1128.73	25.85	25.60	14.40	40.5050399	-104.5852913	0.00	
1230.00†	6.042	29.362	1228.17	35.11	34.78	19.57	40.5050649	-104.5852724	0.00	
1330.00†	6.042	29.362	1327.62	44.37	43.95	24.73	40.5050899	-104.5852535	0.00	
1430.00†	6.042	29.362	1427.06	53.63	53.13	29.89	40.5051150	-104.5852346	0.00	
1530.00†	6.042	29.362	1526.51	62.90	62.30	35.05	40.5051400	-104.5852157	0.00	
1630.00†	6.042	29.362	1625.95	72.16	71.48	40.21	40.5051650	-104.5851968	0.00	
1730.00†	6.042	29.362	1725.40	81.42	80.65	45.37	40.5051901	-104.5851779	0.00	
1830.00†	6.042	29.362	1824.84	90.68	89.82	50.53	40.5052151	-104.5851590	0.00	
1930.00†	6.042	29.362	1924.29	99.95	99.00	55.70	40.5052401	-104.5851401	0.00	
2030.00†	6.042	29.362	2023.73	109.21	108.17	60.86	40.5052652	-104.5851212	0.00	
2130.00†	6.042	29.362	2123.17	118.47	117.35	66.02	40.5052902	-104.5851023	0.00	
2230.00†	6.042	29.362	2222.62	127.73	126.52	71.18	40.5053152	-104.5850834	0.00	
2330.00†	6.042	29.362	2322.06	136.99	135.70	76.34	40.5053403	-104.5850645	0.00	
2430.00†	6.042	29.362	2421.51	146.26	144.87	81.50	40.5053653	-104.5850456	0.00	
2530.00†	6.042	29.362	2520.95	155.52	154.04	86.66	40.5053904	-104.5850267	0.00	
2630.00†	6.042	29.362	2620.40	164.78	163.22	91.83	40.5054154	-104.5850078	0.00	
2730.00†	6.042	29.362	2719.84	174.04	172.39	96.99	40.5054404	-104.5849889	0.00	
2830.00†	6.042	29.362	2819.28	183.30	181.57	102.15	40.5054655	-104.5849700	0.00	
2930.00†	6.042	29.362	2918.73	192.57	190.74	107.31	40.5054905	-104.5849511	0.00	
3030.00†	6.042	29.362	3018.17	201.83	199.92	112.47	40.5055155	-104.5849322	0.00	
3130.00†	6.042	29.362	3117.62	211.09	209.09	117.63	40.5055406	-104.5849133	0.00	
3230.00†	6.042	29.362	3217.06	220.35	218.27	122.79	40.5055656	-104.5848944	0.00	
3330.00†	6.042	29.362	3316.51	229.62	227.44	127.96	40.5055906	-104.5848755	0.00	
3430.00†	6.042	29.362	3415.95	238.88	236.61	133.12	40.5056157	-104.5848566	0.00	
3530.00†	6.042	29.362	3515.40	248.14	245.79	138.28	40.5056407	-104.5848377	0.00	
3630.00†	6.042	29.362	3614.84	257.40	254.96	143.44	40.5056657	-104.5848188	0.00	
3730.00†	6.042	29.362	3714.28	266.66	264.14	148.60	40.5056908	-104.5847999	0.00	
3830.00†	6.042	29.362	3813.73	275.93	273.31	153.76	40.5057158	-104.5847810	0.00	
3930.00†	6.042	29.362	3913.17	285.19	282.49	158.92	40.5057408	-104.5847621	0.00	
4030.00†	6.042	29.362	4012.62	294.45	291.66	164.09	40.5057659	-104.5847432	0.00	
4130.00†	6.042	29.362	4112.06	303.71	300.83	169.25	40.5057909	-104.5847243	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'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†	6.042	29.362	4211.51	312.97	310.01	174.41	40.5058159	-104.5847054	0.00	
4330.00†	6.042	29.362	4310.95	322.24	319.18	179.57	40.5058410	-104.5846865	0.00	
4430.00†	6.042	29.362	4410.40	331.50	328.36	184.73	40.5058660	-104.5846676	0.00	
4530.00†	6.042	29.362	4509.84	340.76	337.53	189.89	40.5058910	-104.5846487	0.00	
4630.00†	6.042	29.362	4609.28	350.02	346.71	195.05	40.5059161	-104.5846298	0.00	
4730.00†	6.042	29.362	4708.73	359.28	355.88	200.22	40.5059411	-104.5846109	0.00	
4830.00†	6.042	29.362	4808.17	368.55	365.06	205.38	40.5059662	-104.5845920	0.00	
4930.00†	6.042	29.362	4907.62	377.81	374.23	210.54	40.5059912	-104.5845731	0.00	
5030.00†	6.042	29.362	5007.06	387.07	383.40	215.70	40.5060162	-104.5845542	0.00	
5130.00†	6.042	29.362	5106.51	396.33	392.58	220.86	40.5060413	-104.5845353	0.00	
5230.00†	6.042	29.362	5205.95	405.60	401.75	226.02	40.5060663	-104.5845164	0.00	
5330.00†	6.042	29.362	5305.39	414.86	410.93	231.18	40.5060913	-104.5844975	0.00	
5430.00†	6.042	29.362	5404.84	424.12	420.10	236.35	40.5061164	-104.5844786	0.00	
5530.00†	6.042	29.362	5504.28	433.38	429.28	241.51	40.5061414	-104.5844597	0.00	
5630.00†	6.042	29.362	5603.73	442.64	438.45	246.67	40.5061664	-104.5844408	0.00	
5730.00†	6.042	29.362	5703.17	451.91	447.62	251.83	40.5061915	-104.5844219	0.00	
5830.00†	6.042	29.362	5802.62	461.17	456.80	256.99	40.5062165	-104.5844030	0.00	
5930.00†	6.042	29.362	5902.06	470.43	465.97	262.15	40.5062415	-104.5843841	0.00	
6030.00†	6.042	29.362	6001.51	479.69	475.15	267.31	40.5062666	-104.5843652	0.00	
6130.00†	6.042	29.362	6100.95	488.95	484.32	272.48	40.5062916	-104.5843463	0.00	
6230.00†	6.042	29.362	6200.39	498.22	493.50	277.64	40.5063166	-104.5843274	0.00	
6330.00†	6.042	29.362	6299.84	507.48	502.67	282.80	40.5063417	-104.5843085	0.00	
6337.21	6.042	29.362	6307.00	508.15	503.33	283.17	40.5063435	-104.5843071	0.00	KOP
6430.00†	13.006	12.609	6398.48	522.69	517.80	287.85	40.5063831	-104.5842897	8.00	
6530.00†	20.866	7.345	6494.07	551.46	546.49	292.59	40.5064617	-104.5842716	8.00	
6630.00†	28.800	4.888	6584.76	593.26	588.22	296.93	40.5065761	-104.5842545	8.00	
6730.00†	36.762	3.426	6668.76	647.28	642.18	300.78	40.5067241	-104.5842386	8.00	
6830.00†	44.735	2.426	6744.46	712.46	707.32	304.06	40.5069028	-104.5842244	8.00	
6930.00†	52.715	1.673	6810.38	787.54	782.36	306.71	40.5071087	-104.5842121	8.00	
7030.00†	60.699	1.066	6865.22	871.06	865.86	308.69	40.5073378	-104.5842019	8.00	
7130.00†	68.685	0.547	6907.94	961.39	956.18	309.95	40.5075856	-104.5841940	8.00	
7230.00†	76.673	0.082	6937.69	1056.77	1051.57	310.46	40.5078474	-104.5841886	8.00	
7330.00†	84.662	359.647	6953.89	1155.35	1150.16	310.22	40.5081181	-104.5841858	8.00	
7396.82	90.000	359.364	6957.00 <sup>1</sup>	1222.05	1216.89	309.65	40.5083012	-104.5841854	8.00	LP/TPZ
7430.00†	90.000	359.364	6957.00	1255.21	1250.06	309.28	40.5083923	-104.5841855	0.00	
7530.00†	90.000	359.364	6957.00	1355.17	1350.05	308.17	40.5086668	-104.5841858	0.00	
7630.00†	90.000	359.364	6957.00	1455.13	1450.05	307.06	40.5089413	-104.5841860	0.00	
7730.00†	90.000	359.364	6957.00	1555.09	1550.04	305.95	40.5092157	-104.5841863	0.00	
7830.00†	90.000	359.364	6957.00	1655.05	1650.04	304.84	40.5094902	-104.5841866	0.00	
7930.00†	90.000	359.364	6957.00	1755.01	1750.03	303.72	40.5097647	-104.5841869	0.00	
8030.00†	90.000	359.364	6957.00	1854.97	1850.02	302.61	40.5100392	-104.5841872	0.00	
8130.00†	90.000	359.364	6957.00	1954.93	1950.02	301.50	40.5103137	-104.5841874	0.00	
8230.00†	90.000	359.364	6957.00	2054.89	2050.01	300.39	40.5105882	-104.5841877	0.00	
8330.00†	90.000	359.364	6957.00	2154.85	2150.00	299.28	40.5108626	-104.5841880	0.00	
8430.00†	90.000	359.364	6957.00	2254.81	2250.00	298.17	40.5111371	-104.5841883	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'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	359.364	6957.00	2354.77	2349.99	297.06	40.5114116	-104.5841886	0.00	
8630.00†	90.000	359.364	6957.00	2454.73	2449.99	295.95	40.5116861	-104.5841888	0.00	
8730.00†	90.000	359.364	6957.00	2554.69	2549.98	294.84	40.5119606	-104.5841891	0.00	
8830.00†	90.000	359.364	6957.00	2654.65	2649.97	293.73	40.5122351	-104.5841894	0.00	
8930.00†	90.000	359.364	6957.00	2754.61	2749.97	292.62	40.5125095	-104.5841897	0.00	
9030.00†	90.000	359.364	6957.00	2854.57	2849.96	291.51	40.5127840	-104.5841900	0.00	
9130.00†	90.000	359.364	6957.00	2954.53	2949.96	290.40	40.5130585	-104.5841902	0.00	
9230.00†	90.000	359.364	6957.00	3054.49	3049.95	289.29	40.5133330	-104.5841905	0.00	
9330.00†	90.000	359.364	6957.00	3154.45	3149.94	288.17	40.5136075	-104.5841908	0.00	
9430.00†	90.000	359.364	6957.00	3254.41	3249.94	287.06	40.5138820	-104.5841911	0.00	
9530.00†	90.000	359.364	6957.00	3354.37	3349.93	285.95	40.5141565	-104.5841914	0.00	
9630.00†	90.000	359.364	6957.00	3454.33	3449.92	284.84	40.5144309	-104.5841916	0.00	
9730.00†	90.000	359.364	6957.00	3554.29	3549.92	283.73	40.5147054	-104.5841919	0.00	
9830.00†	90.000	359.364	6957.00	3654.25	3649.91	282.62	40.5149799	-104.5841922	0.00	
9930.00†	90.000	359.364	6957.00	3754.21	3749.91	281.51	40.5152544	-104.5841925	0.00	
10030.00†	90.000	359.364	6957.00	3854.17	3849.90	280.40	40.5155289	-104.5841928	0.00	
10130.00†	90.000	359.364	6957.00	3954.13	3949.89	279.29	40.5158034	-104.5841931	0.00	
10230.00†	90.000	359.364	6957.00	4054.09	4049.89	278.18	40.5160778	-104.5841933	0.00	
10330.00†	90.000	359.364	6957.00	4154.05	4149.88	277.07	40.5163523	-104.5841936	0.00	
10430.00†	90.000	359.364	6957.00	4254.01	4249.88	275.96	40.5166268	-104.5841939	0.00	
10530.00†	90.000	359.364	6957.00	4353.97	4349.87	274.85	40.5169013	-104.5841942	0.00	
10630.00†	90.000	359.364	6957.00	4453.93	4449.86	273.73	40.5171758	-104.5841945	0.00	
10730.00†	90.000	359.364	6957.00	4553.89	4549.86	272.62	40.5174503	-104.5841947	0.00	
10830.00†	90.000	359.364	6957.00	4653.85	4649.85	271.51	40.5177247	-104.5841950	0.00	
10930.00†	90.000	359.364	6957.00	4753.80	4749.84	270.40	40.5179992	-104.5841953	0.00	
11030.00†	90.000	359.364	6957.00	4853.76	4849.84	269.29	40.5182737	-104.5841956	0.00	
11130.00†	90.000	359.364	6957.00	4953.72	4949.83	268.18	40.5185482	-104.5841959	0.00	
11230.00†	90.000	359.364	6957.00	5053.68	5049.83	267.07	40.5188227	-104.5841961	0.00	
11330.00†	90.000	359.364	6957.00	5153.64	5149.82	265.96	40.5190972	-104.5841964	0.00	
11430.00†	90.000	359.364	6957.00	5253.60	5249.81	264.85	40.5193717	-104.5841967	0.00	
11530.00†	90.000	359.364	6957.00	5353.56	5349.81	263.74	40.5196461	-104.5841970	0.00	
11630.00†	90.000	359.364	6957.00	5453.52	5449.80	262.63	40.5199206	-104.5841973	0.00	
11730.00†	90.000	359.364	6957.00	5553.48	5549.80	261.52	40.5201951	-104.5841975	0.00	
11830.00†	90.000	359.364	6957.00	5653.44	5649.79	260.41	40.5204696	-104.5841978	0.00	
11930.00†	90.000	359.364	6957.00	5753.40	5749.78	259.30	40.5207441	-104.5841981	0.00	
12030.00†	90.000	359.364	6957.00	5853.36	5849.78	258.18	40.5210186	-104.5841984	0.00	
12130.00†	90.000	359.364	6957.00	5953.32	5949.77	257.07	40.5212930	-104.5841987	0.00	
12230.00†	90.000	359.364	6957.00	6053.28	6049.76	255.96	40.5215675	-104.5841989	0.00	
12330.00†	90.000	359.364	6957.00	6153.24	6149.76	254.85	40.5218420	-104.5841992	0.00	
12430.00†	90.000	359.364	6957.00	6253.20	6249.75	253.74	40.5221165	-104.5841995	0.00	
12530.00†	90.000	359.364	6957.00	6353.16	6349.75	252.63	40.5223910	-104.5841998	0.00	
12630.00†	90.000	359.364	6957.00	6453.12	6449.74	251.52	40.5226655	-104.5842001	0.00	
12730.00†	90.000	359.364	6957.00	6553.08	6549.73	250.41	40.5229399	-104.5842003	0.00	
12830.00†	90.000	359.364	6957.00	6653.04	6649.73	249.30	40.5232144	-104.5842006	0.00	
12930.00†	90.000	359.364	6957.00	6753.00	6749.72	248.19	40.5234889	-104.5842009	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'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	359.364	6957.00	6852.96	6849.72	247.08	40.5237634	-104.5842012	0.00	
13130.00†	90.000	359.364	6957.00	6952.92	6949.71	245.97	40.5240379	-104.5842015	0.00	
13230.00†	90.000	359.364	6957.00	7052.88	7049.70	244.86	40.5243124	-104.5842017	0.00	
13330.00†	90.000	359.364	6957.00	7152.84	7149.70	243.74	40.5245868	-104.5842020	0.00	
13430.00†	90.000	359.364	6957.00	7252.80	7249.69	242.63	40.5248613	-104.5842023	0.00	
13530.00†	90.000	359.364	6957.00	7352.76	7349.68	241.52	40.5251358	-104.5842026	0.00	
13630.00†	90.000	359.364	6957.00	7452.72	7449.68	240.41	40.5254103	-104.5842029	0.00	
13730.00†	90.000	359.364	6957.00	7552.68	7549.67	239.30	40.5256848	-104.5842032	0.00	
13830.00†	90.000	359.364	6957.00	7652.64	7649.67	238.19	40.5259593	-104.5842034	0.00	
13930.00†	90.000	359.364	6957.00	7752.60	7749.66	237.08	40.5262337	-104.5842037	0.00	
14030.00†	90.000	359.364	6957.00	7852.56	7849.65	235.97	40.5265082	-104.5842040	0.00	
14130.00†	90.000	359.364	6957.00	7952.52	7949.65	234.86	40.5267827	-104.5842043	0.00	
14230.00†	90.000	359.364	6957.00	8052.48	8049.64	233.75	40.5270572	-104.5842046	0.00	
14330.00†	90.000	359.364	6957.00	8152.44	8149.63	232.64	40.5273317	-104.5842048	0.00	
14430.00†	90.000	359.364	6957.00	8252.40	8249.63	231.53	40.5276062	-104.5842051	0.00	
14530.00†	90.000	359.364	6957.00	8352.36	8349.62	230.42	40.5278806	-104.5842054	0.00	
14630.00†	90.000	359.364	6957.00	8452.32	8449.62	229.31	40.5281551	-104.5842057	0.00	
14730.00†	90.000	359.364	6957.00	8552.28	8549.61	228.19	40.5284296	-104.5842060	0.00	
14830.00†	90.000	359.364	6957.00	8652.24	8649.60	227.08	40.5287041	-104.5842062	0.00	
14930.00†	90.000	359.364	6957.00	8752.20	8749.60	225.97	40.5289786	-104.5842065	0.00	
15030.00†	90.000	359.364	6957.00	8852.15	8849.59	224.86	40.5292531	-104.5842068	0.00	
15130.00†	90.000	359.364	6957.00	8952.11	8949.59	223.75	40.5295275	-104.5842071	0.00	
15230.00†	90.000	359.364	6957.00	9052.07	9049.58	222.64	40.5298020	-104.5842074	0.00	
15330.00†	90.000	359.364	6957.00	9152.03	9149.57	221.53	40.5300765	-104.5842076	0.00	
15430.00†	90.000	359.364	6957.00	9251.99	9249.57	220.42	40.5303510	-104.5842079	0.00	
15530.00†	90.000	359.364	6957.00	9351.95	9349.56	219.31	40.5306255	-104.5842082	0.00	
15630.00†	90.000	359.364	6957.00	9451.91	9449.55	218.20	40.5309000	-104.5842085	0.00	
15730.00†	90.000	359.364	6957.00	9551.87	9549.55	217.09	40.5311744	-104.5842088	0.00	
15830.00†	90.000	359.364	6957.00	9651.83	9649.54	215.98	40.5314489	-104.5842090	0.00	
15930.00†	90.000	359.364	6957.00	9751.79	9749.54	214.87	40.5317234	-104.5842093	0.00	
16030.00†	90.000	359.364	6957.00	9851.75	9849.53	213.75	40.5319979	-104.5842096	0.00	
16130.00†	90.000	359.364	6957.00	9951.71	9949.52	212.64	40.5322724	-104.5842099	0.00	
16230.00†	90.000	359.364	6957.00	10051.67	10049.52	211.53	40.5325469	-104.5842102	0.00	
16330.00†	90.000	359.364	6957.00	10151.63	10149.51	210.42	40.5328213	-104.5842104	0.00	
16430.00†	90.000	359.364	6957.00	10251.59	10249.51	209.31	40.5330958	-104.5842107	0.00	
16530.00†	90.000	359.364	6957.00	10351.55	10349.50	208.20	40.5333703	-104.5842110	0.00	
16630.00†	90.000	359.364	6957.00	10451.51	10449.49	207.09	40.5336448	-104.5842113	0.00	
16730.00†	90.000	359.364	6957.00	10551.47	10549.49	205.98	40.5339193	-104.5842116	0.00	
16830.00†	90.000	359.364	6957.00	10651.43	10649.48	204.87	40.5341937	-104.5842118	0.00	
16930.00†	90.000	359.364	6957.00	10751.39	10749.47	203.76	40.5344682	-104.5842121	0.00	
17030.00†	90.000	359.364	6957.00	10851.35	10849.47	202.65	40.5347427	-104.5842124	0.00	
17130.00†	90.000	359.364	6957.00	10951.31	10949.46	201.54	40.5350172	-104.5842127	0.00	
17230.00†	90.000	359.364	6957.00	11051.27	11049.46	200.43	40.5352917	-104.5842130	0.00	
17330.00†	90.000	359.364	6957.00	11151.23	11149.45	199.32	40.5355662	-104.5842133	0.00	
17430.00†	90.000	359.364	6957.00	11251.19	11249.44	198.20	40.5358406	-104.5842135	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'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	359.364	6957.00	11351.15	11349.44	197.09	40.5361151	-104.5842138	0.00	
17569.58	90.000	359.364	6957.00‡	11390.72	11389.02	196.65	40.5362238	-104.5842139	0.00	BHL

HOLE & CASING SECTIONS - Ref Wellbore: BISHOP A06-712 PWB Ref Wellpath: BISHOP A06-712 (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	1944.17	0.00	0.00	100.83	56.73

## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'FEL,SEC.07)		

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
OGDP 1 SEC.07-T06N-R64W	N/A	2.00	149.78	38.50	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
OGDP 1 SEC.08-T06N-R64W	N/A	2.00	149.78	38.50	3254380.72	1428262.61	40.5053800	-104.5852000	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.05-T06N-R64W	N/A	20.00	168.21	-4213.86	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.06-T06N-R64W	N/A	20.00	168.21	-4213.86	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.31-T07N-R64W	N/A	20.00	168.21	-4213.86	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
OGDP1 SEC.32-T07N-R64W	N/A	20.00	168.21	-4213.86	3250128.51	1428281.04	40.5055500	-104.6004900	polygon
	2D Polygon: dimensions not calculated								
BISHOP A06-712 BHL Rev-1 (200'FSL & 230'FEL,SEC.31)	N/A	6914.00	11389.02	196.65	3254538.86	1439501.46	40.5362238	-104.5842139	point
BISHOP A06-712 LP Rev-1 (200'FSL & 143'FEL,SEC.06)	N/A	6914.00	1216.89	309.65	3254651.85	1429329.68	40.5083012	-104.5841854	point
2) BISHOP A06-712 BHL Rev-2 (200'FSL & 230'FEL,SEC.31)	17569.58	6957.00	11389.02	196.65	3254538.86	1439501.46	40.5362238	-104.5842139	point
1) BISHOP A06-712 LP Rev-2 (200'FSL & 143'FEL,SEC.06)	7396.82	6957.00	1216.89	309.65	3254651.85	1429329.68	40.5083012	-104.5841854	point
DP 136 Hardlines (200'FNL/FSL & 300'FEL/FWL)	N/A	7003.00	149.97	22.37	3254364.58	1428262.81	40.5053810	-104.5852580	polygon
	2D Polygon: dimensions not calculated								

## SURVEY PROGRAM - Ref Wellbore: BISHOP A06-712 PWB Ref Wellpath: BISHOP A06-712 (REV-C.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1950.00	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-712 PWB
1950.00	17569.58	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-712 PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'FEL,SEC.07)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	29.362	30.00	SHL
700.00	0.000	29.362	700.00	End of Tangent
1002.12	6.042	29.362	1001.57	Build (XS)
6337.21	6.042	29.362	6307.00	KOP
7396.82	90.000	359.364	6957.00	LP/TPZ
17569.58	90.000	359.364	6957.00	BHL

**REFERENCE WELLPATH IDENTIFICATION**

Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'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 11:07:41 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	-149.78	-38.50	3254342.22	1428112.84	40°30'17.8920"N	104°35'7.2384"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 (4744'GL+30'KB@4774'RKB) (RKB) to Facility Vertical Datum	4774.00ft
Horizontal Reference Pt	Slot	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Mean Sea Level	4774.00ft
Vertical Reference Pt	RIG (4744'GL+30'KB@4774'RKB) (RKB)	RIG (4744'GL+30'KB@4774'RKB) (RKB) to Ground Level at Slot (SLOT#24 BISHOP A06-712 (1010'FNL & 463'FEL,SEC.07))	4774.00ft
MD Reference Pt	RIG (4744'GL+30'KB@4774'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 A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'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 A06-712 PWB    Ref Wellpath: BISHOP A06-712 (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	1944.17	0.00	0.00	100.83	56.73

**SURVEY PROGRAM - Ref Wellbore: BISHOP A06-712 PWB    Ref Wellpath: BISHOP A06-712 (REV-C.0) PWP**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	1950.00	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-712 PWB
1950.00	17569.58	OWSG MWD rev2 (MS+IFR1)		BISHOP A06-712 PWB

**REFERENCE WELLPATH IDENTIFICATION**

Operator	NOBLE ENERGY, INC	Well	BISHOP A06-712
Field	WELD COUNTY (NOBLE NAD 83 GRID)	API/Legal	
Facility	SEC.07-T06N-R64W	Wellbore	BISHOP A06-712 PWB
Slot	SLOT#24 BISHOP A06-712 (1010'FNL & 463'FEL,SEC.07)		

**CALCULATION RANGE & CUTOFF**

From: 30.00ft MD	To: 17569.58ft MD	C-C Cutoff: (none)
------------------	-------------------	--------------------

**OFFSET WELL CLEARANCE SUMMARY** (15 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#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	6788.31	29.00	6788.31	6794.54	0.58	6794.54	FAIL
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	1601.24	25.01	1601.24	1606.90	1.53	1606.90	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	2303.65	34.52	2303.65	2310.19	1.65	6430.00	PASS
SEC.07-T06N-R64W	SLOT#23 BISHOP A06-722 (1009'FNL & 486'FEL,SEC.07)	BISHOP A06-722	BISHOP A06-722 PWB	BISHOP A06-722 (REV-C.0) PWP	Planned	30.00	22.53	17530.00	788.14	2.42	17569.58	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	22.53	17569.58	17569.58	2.61	17569.58	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	150.11	7087.46	7087.46	3.53	7087.46	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	1471.99	54.53	1471.99	1485.92	3.72	1485.92	PASS
SEC.07-T06N-R64W	SLOT#22 BISHOP A06-731 (1009'FNL & 508'FEL,SEC.07)	BISHOP A06-731	BISHOP A06-731 PWB	BISHOP A06-731 (REV-B.0) PWP	Planned	30.00	45.05	17530.00	834.70	4.90	17569.58	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	45.05	17530.00	17569.58	5.23	17569.58	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	30.00	67.58	17530.00	930.00	7.19	17569.58	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	67.58	17530.00	17569.58	7.77	17569.58	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	90.10	17530.00	17569.58	10.42	17569.58	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	151.90	7030.00	7137.43	15.25	7137.43	PASS
SEC.07-T06N-R64W	SLOT#14 BISHOP A18-733 (859'FNL & 507'FEL,SEC.07)	BISHOP A18-733	BISHOP A18-733 PWB	BISHOP A18-733 (REV-C.0) PWP	Planned	30.00	156.59	7396.82	1073.14	17.90	7430.00	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	164.60	7630.00	1068.39	18.79	7730.00	PASS